INSECTS OF MICRONESIA
COLEOPTERA: CERAMBYCIDAE

BY

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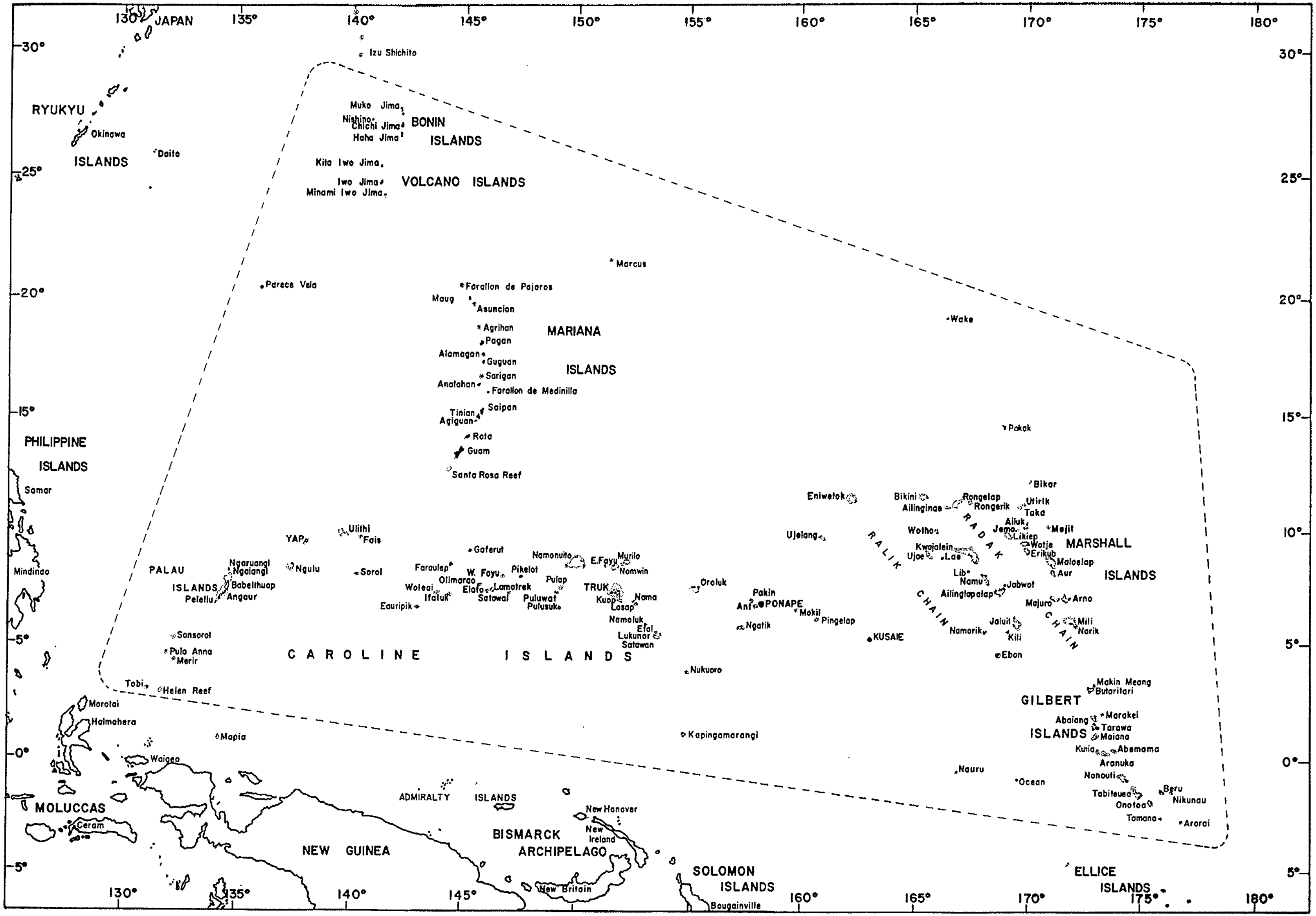
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JAPAN
RYUKYU ISLANDS
Okinawa
Daito
Izu Shichito
Muko Jima
Nishino
Chichi Jima
Haha Jima
BONIN ISLANDS
Kita Iwo Jima
Iwo Jima
Minami Iwo Jima
VOLCANO ISLANDS
Marcus
Parece Vela
Farallon de Pajaros
Maug
Asuncion
Agrihan
Pagan
Alamagan
Guguan
Sarigan
Anatahan
Farallon de Medinilla
Saipan
Tinian
Agiguan
Rota
Guam
Santa Rosa Reef
MARIANA ISLANDS
Wake
Pokak
PHILIPPINE ISLANDS
Samar
Mindinao
PALAU ISLANDS
Ngaruangl
Ngaiangl
Babelthuap
Peleliu
Angaur
Sonsorol
Pulo Anna
Merir
Tobi
Helen Reef
YAP
Ulithi
Fais
Ngulu
Sorol
Gaferut
Faraulep
W. Fayu
Pikelot
Olimarao
Woleai
Ifaluk
Elato
Lamotrek
Satawal
Eauripik
Namonuito
E.Fayu
Murilo
Nomwin
Pulap
Puluwat
Pulusuk
TRUK
Kuop
Losap
Nama
Namoluk
Etal
Lukunor
Satawan
CAROLINE ISLANDS
Oroluk
Pakin
Ant
PONAPE
Mokil
Pingelap
Ngatik
Nukuoro
KUSAIE
Ujelang
Eniwetok
Bikini
Ailinginae
Rongelap
Rongerik
Bikar
Utirik
Taka
Ailuk
Jemo
Likiep
Mejit
Wotho
Kwajalein
Ujae
Lae
Wotje
Erikub
Maloelap
Aur
Lib
Namu
Jabwot
Ailinglapalap
Majuro
Arno
Jaluit
Kili
Namorik
Mili
Narik
Ebon
RADAK
RALIK CHAIN
CHAIN
MARSHALL ISLANDS
Makin Meang
Butaritari
Marakei
Abaiang
Tarawa
Maiana
Kuria
Abemama
Aranuka
Nonouti
Tabiteuea
Beru
Nikunau
Onotoa
Tamana
Arorai
GILBERT ISLANDS
Nauru
Ocean
Kapingamarangi
Mapia
Morotai
Halmahera
Waigeo
MOLUCCAS
Ceram
NEW GUINEA
ADMIRALTY ISLANDS
BISMARCK ARCHIPELAGO
New Hanover
New Ireland
New Britain
SOLOMON ISLANDS
Bougainville
ELLICE ISLANDS
130°
135°
140°
145°
150°
155°
160°
165°
170°
175°
180°
30°
25°
20°
15°
10°
5°
0°

INSECTS OF MICRONESIA

Coleoptera: Cerambycidae[1]

By J. LINSLEY GRESSITT

BISHOP MUSEUM, HONOLULU

INTRODUCTION

Herein are enumerated 105 longicorn beetles, one of which is from Hachijo Jima, just north of Micronesia. The Micronesian forms, including those of the Bonin Islands, represent 98 different species and six additional subspecies. These belong to 34 genera in 19 tribes of three subfamilies. Forty-eight new species and six new subspecies are described, as well as three new genera and three new subgenera. This paper is based on the study of nearly 10,000 specimens of cerambycids from Micronesia. The material was accumulated by many collectors, most of whom are listed in volume 1 of this series (pp. 195-199). The majority were taken by H. S. Dybas, P. A. Adams, J. W. Beardsley, J. F. Gates Clarke, R. J. Goss, Daniel Langford, Dengo Matusita, R. G. Oakley, R. W. Potts, H. K. Townes, and me. Most of the specimens are in the United States National Museum and Bishop Museum, with many in Chicago Natural History Museum, and fewer in the California Academy of Sciences, Museum of Comparative Zoölogy, and Kyushu University. Some paratypes are deposited in the British Museum (Natural History), and the American Museum of Natural History.

The United States Office of Naval Research, the Pacific Science Board (National Research Council), the National Science Foundation, and Bishop Museum have made this survey and the publication of the results possible. Field research was aided by a contract between the Office of Naval Research, Department of the Navy, and the National Academy of Sciences, NR 160-175.

I am much indebted to Dorothy Rainwater for most of the drawings, to Margaret Gressitt for a few drawings, and to Setsuko Nakata for other assistance. I am grateful to W. M. Anderson, E. A. Chapin, O. L. Cartwright, J. F. Gates Clarke, H. S. Dybas, and G. B. Vogt for specimens and for other help.

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[1] This represents, in small part, Results of Professor T. Esaki's Micronesian Expeditions (1936-1940), No. 84.

Previous contributions to the knowledge of Micronesian cerambycids have been rather scattered, with no single paper treating more than a few species. In the general bibliography to this series (vol. 2), articles by 22 authors are indexed. Only those of Aurivillius (1908),[2] Blair (1940), Gressitt (1937, 1942, 1954b), Matsushita (1932a, b; 1935), Ohbayashi (1941), and Swezey (1942e), treat more than one or two species per article. These works were based primarily on material from the sources mentioned in volume 1, except for that of Aurivillius which was based on material accumulated by Governor von Bennigsen during the German regime. Until now, 56 species have been recorded from Micronesia; and of these, 27 are listed from the Caroline Islands by Blair (1940). A few of these are synonymized in this work.

The following symbols indicate the institutions in which specimens are stored: US (United States National Museum), BISHOP (Bishop Museum), KU (Kyushu University), BM (British Museum), CAS (California Academy of Sciences), CM (Chicago Natural History Museum), MCZ (Museum of Comparative Zoölogy), HSPA (Hawaiian Sugar Planters' Association Experiment Station), and AMNH (American Museum of Natural History).

ZOOGEOGRAPHY

As to areal representation within the scope of this work, 16 species are here recorded from the Bonin Islands, one from the Volcano Islands, six from the northern Mariana Islands, 22 from the southern Mariana Islands, 26 from Palau, 11 from Yap, 12 from Caroline atolls (or low islands), 15 from Truk, 16 from Ponape, 12 from Kusaie, nine from the Marshall Islands, one from Wake Atoll, and three from the Gilbert Islands. None are at hand from Marcus Island, Ocean Island, or Nauru Island.

This family presents a rather different picture from that demonstrated by the Micronesian Chrysomelidae. For instance, besides being much more richly represented, a lower proportion of the native species is limited to Palau, and in Guam and elsewhere there are proportionately far fewer recently introduced species. Representation is more general, with endemic species in many more island groups, and there is better representation on the more isolated groups and the atolls. For instance, in the Marshall Islands there are nine cerambycids, as compared with one chrysomelid. A surprising fact is that of these nine in the Marshalls, four appear to be endemic species and one appears to be an endemic subspecies. Schnee (1902, Naturwiss. Beobachter Zool. Garten, Frankfurt **43**: 174) remarks on the absence of longicorns in the Marshalls. Possibly some of those recorded here have been recently introduced from the Carolines. This could even be true for some of the endemics

[2] Dates in parentheses refer to citations in the general bibliography of this series (volume 2).

here described, although it also suggests that these atolls may possibly maintain the vestiges of a former endemic fauna of high islands which eroded away to atolls, or at least that the atolls are older than a few thousand years as recently suggested (Insects of Micronesia 1:21). In the 104 forms at hand, there appears to be an endemism of 85 percent, with 79 endemic species and eight endemic subspecies. This is a much higher percentage of endemism than the 45 percent estimated for Micronesian insects in general (op. cit., p. 35). Subtracting about five species perhaps introduced by man gives an endemicity of 88 percent. Of the 34 genera, five appear to be endemic, as do three subgenera. Of the five endemic genera, three occur in the Carolines, one in the Carolines and Wake Atoll, and one in the Bonins. Of the three endemic subgenera, one occurs in the Carolines, one in the Carolines and Marianas, and one in only the Marianas. The number of endemic kinds in each island group is indicated at the end of the distributional list which follows. Each of the single Iwo Jima (Volcano Islands) and Wake Atoll species is endemic. Three species are endemic to the northern and southern Marianas together. Fifty-three are endemic to the Carolines. Two are restricted to the Carolines and southern Marianas, three to the Carolines and Marshalls, and one to the southern Marianas, Carolines, and Marshalls. Three are restricted to Palau and Yap; one to Yap and Caroline atolls; one to Yap, Caroline atolls, and Truk; one to Caroline atolls and Truk; one to Caroline atolls, Truk, and Ponape; and one to Truk and Ponape. The island groups with more than 50 percent endemism of species and subspecies are the Bonins, southern Marianas, Palau, Ponape, Kusaie, and the Marshalls. The groups with the highest percentages of endemism are Palau with 73 percent, the Bonins with 68 percent, and Kusaie with 50 percent.

The longicorn fauna of Micronesia bears out the oceanic nature of these islands. The area has a disharmonic fauna with conspicuous gaps. There are several tribes very richly represented in New Guinea or the Philippines, such as the Callichromini, Tmesisternini, and Gleneini, besides many other tribes with lesser numbers of species, all of which are totally lacking in Micronesia. The number of genera in New Guinea or the Philippines is many times that represented in Micronesia.

Two tribes, the Callidiopini and the Acanthocinini, include nearly one-half of the Micronesian species. The Callidiopini is primarily an oceanic group ranging across the Pacific and Indian Oceans, with smaller numbers of species in South Asia, and a very few in the northern Neotropics. Many endemic genera occur in New Zealand, Australia, and Madagascar. The Acanthocinini is cosmopolitan, and particularly rich in the Neotropical Region, but has numerous genera in the Oriental Region, Madagascar, and Africa.

The genera best represented in Micronesia are *Ceresium, Longipalpus, Dihammus, Prosoplus, Sybra,* and *Sciadella. Ceresium* and *Longipalpus* have a Pacific-Indian Ocean distribution, both extending to Madagascar or the Seychelles, *Ceresium* occuring also in Asia. *Dihammus* and *Sybra* are Oriental, but particularly rich in the Papuan Subregion. *Sybra* is found as far west as Madagascar. *Sciadella* is thus far known from Samoa, through Fiji and Micronesia to the Bonins and Botel-Tobago, but it may occur in the Papuan Subregion. Other Micronesian genera of interesting affinity are *Olethrius,* a Polynesian-Melanesian genus; *Glaucytes,* in Palau, which occurs from Madagascar to Samoa through New Guinea and eastern Melanesia, but not in Asia; *Oopsis,* in the Marshalls, a predominantly Polynesian genus which may have evolved in eastern Melanesia; and *Paratrypanius,* known only from Samoa and Ponape.

As to over-all generic relationships, of the five endemic genera, one is considered to be of Oriental or Philippine-Papuan relationship and the other four of Papuan or Philippine-Papuan relationships. Of the 29 non-endemic genera, one is cosmopolitan, 10 are Oriental, six are Oriental-Papuan, two are Philippine-Papuan, one Papuan, one Papuan-Polynesian, and eight are oceanic, that is Polynesian, or extending from Polynesia or Micronesia to Madagascar through New Guinea. In terms of the numbers of kinds, the total relationships for all forms are approximately 17 Oriental, 12 Oriental-Papuan, 12 Philippine-Papuan, three Papuan, and 61 Papuan-Oceanic. A few of the Bonin species may be of Palearctic rather than Oriental relationships; but the genera concerned are found in the Oriental Region, and it may be safe to consider the relationships Oriental when they are not oceanic.

To compare endemism in this group for Micronesia with that in Hawaii and Samoa, the generic endemism is less in Micronesia, particularly as compared with Hawaii, the native species of which almost entirely represent endemic genera. The contrast with Samoa is not nearly so great, and two of the genera formerly thought to be endemic to Samoa are now known also from Micronesia. Eleven of the 12 non-endemic genera of the 14 Samoan genera occur also in Micronesia, whereas none of the genera with endemic species in Hawaii are represented in Micronesia. However, a few widespread Pacific species are common to Micronesia and Hawaii. Endemism on the species level is less in Micronesia than in Hawaii; but it is greater in Micronesia than in Samoa, primarily because of the close relationships between the faunas of Samoa and Tonga. As far as is now known, Micronesia has nearly three times as many species as Samoa and slightly more than Hawaii.

It may be noted that nocturnal forms are proportionately better represented in Micronesia in this group and that day-flying forms are poorly represented and restricted largely in western Micronesia to forms of Oriental origin. The fact, also, that the majority of these nocturnal longicorns bore in dead

Table 1.—Distributional List of Micronesian Cerambycidae

	Micronesian Island Groups												Other Localities
					Caroline								
	Bonin	Volcano	N. Mariana	S. Mariana	Palau	Yap	Caroline Atolls	Truk	Ponape	Kusaie	Marshall	Gilbert	
Prioninae													
1. Olethrius carolinensis					×	×							
2. O. glabrus										×			
3. Eurypoda sp.	×												
Cerambycinae													
4. Hoplocerambyx inhirsutus					×								
5. Stromatium longicorne	×												Oriental Region, Philippines
6. Allotraeus (Nysina) boninensis	×												
7. Curtomerus flavus	×												W. Indies, Mexico, E. Polynesia
8. Ceresium (Ceresiellum) olidum												×	Tahiti, Fiji
9. C. planatum					×	×							
10. C. usingeri				×									
11. C. (Paraceresium) saipanicum				×									
12. C. (s. str.) clarkei										×			
13. C. guamum guamum				×									
14. C. guamum rotanum				×									
15. C. guttaticolle yapense						×							
16. C. testaceum								×					
17. C. robustum											×		
18. C. casilelium									×				
19. C. nanyoanum					×								
20. C. adamsi adamsi									×				
21. C. adamsi kusaiana										×			
22. C. simile	×												
23. C. signaticolle	×												
24. C. yoshinoi					×								
25. C. sublucidum				×									
26. C. unicolor unicolor	×		×	×	×			×	×	×		×	Polynesia, Fiji, New Hebrides, Solomons
27. C. unicolor marshallum											×		
28. Examnes ponapensis									×				
29. Gelonaetha hirta				×									India, Thai, Philippines, Taiwan, Hawaii, Tahiti
30. Longipalpus palauensis					×								
31. L. guamensis				×			×	×			×		

	Micronesian Island Groups												Other Localities
					Caroline								
	Bonin	Volcano	N. Mariana	S. Mariana	Palau	Yap	Caroline Atolls	Truk	Ponape	Kusaie	Marshall	Gilbert	
32. L. saipanensis				×									
33. L. sinuaticollis					×	×							
34. Ogasawara testacea	×												
35. Merionoeda (Ocytasia) tosawai	×												
36. Xylotrechus grayii				×									China, Taiwan, Japan
37. X. ogasawarensis	×												
38. Chlorophorus annularis	×			×									E. Asia, Japan, Ryukyu, Taiwan, Philippines
39. C. boninensis	×												
40. C. muscosus	×												S. Japan, Amami, Izu Is.
41. Demonax palauanus					×								
42. Glaucytes argentea					×								
Lamiinae													
43. Pelargoderus luteosparsus					×								
44. Dihammus marianarum				×									
45. D. fulvicornis hachijoensis													Hachijo I.
46. D. korolensis					×								
47. D. trucanus								×					
48. D. bennigseni									×				
49. D. fasciatus							×	×		×			Australia, New Guinea, Solomons
50. D. magneticus auripilis					×								
51. Batocera oceanica					×								
52. Coptops hirtiventris	×												
53. Olenecamptus beardsleyi					×								
54. O. bilobus lacteoguttatus				×				×					
55. Caroliniella aenescens aenescens							×	×		×			
56. C. aenescens palauensis					×				×				
57. Pterolophia camura				×									Philippines, Botel-Tobago, Taiwan
58. Prosoplus bankii				×									Indonesia, Philippines, N. Australia, Hawaii
59. P. marianarum			×	×									
60. P. lividus					×								
61. P. xyalopus						×	×				×		
62. P. atlanticus atlanticus									×		×		
63. P. atlanticus trukensis							×	×					
64. P. atlanticus kusaiecus										×			
65. P. hibisci											×		

	Micronesian Island Groups				Caroline								Other Localities
	Bonin	Volcano	N. Mariana	S. Mariana	Palau	Yap	Caroline Atolls	Truk	Ponape	Kusaie	Marshall	Gilbert	
66. P. major											×		
67. Ropica squamulosa				×	×	×	×	×		×			
68. R. palauana					×								
69. R. yapana						×							
70. Sybra alternans				×	×	×	×			×			Indonesia, Philippines, Hawaii
71. S. ponapensis							×	×	×				
72. S. anatahana			×										
73. S. chamorro				×									
74. S. emarginata				×									
75. S. consobrina					×								
76. S. oreora					×								
77. S. convexa									×				
78. S. catalana												×	
79. Oopsis marshallensis											×		
80. Palausybra vestigialis					×								
81. Paratrypanius intricatus									×				
82. Exocentrus ciliatissimus					×								
83. Sciadella (Acanthosciades) latior									×	×			
84. S. latispina								×	×				
85. S. (s. str.) bioculata	×												
86. S. iwojimana		×											
87. S. meridiana			×	×									
88. S. aureopleura						×	×	×					
89. S. argentipleura							×	×					
90. S. (Micronesiella) esakii								×					
91. S. boharti			×										
92. S. mariana			×	×									
93. S. subcylindrica					×								
94. S. palauicola					×								
95. S. attenuata						×							
96. S. saltator						×							
97. S. atollorum							×						
98. S. townesi									×				
99. S. versicolor									×				
100. Nonymoides carolinensis										×			
101. N. subglabrus									×				
102. Paremeopedus minimus							×	×	×		×		
103. P. tiliacei										×			
104. P. wakensis													Wake
105. Boninella degenerata	×												
Total	16	1	6	22	26	11	12	15	16	12	9	3	
Endemic	11	1	2	10	19	4	1	4	9	6	5	1	

wood suggests that many of the forms in Micronesia reached the islands by means of floating logs or trees or by flying in stormy weather. Or at least it may be suggested that sun-loving forms—such as species of Callichromini, Gleneini, and other tribes which are totally lacking in Micronesia—tend to hide in bad weather and are thus less subject to transport across sea by storms. Many of the sun-loving forms are known to bore in living trees, hence are not likely to float to islands in ocean currents. Furthermore, they are, in general, not associated with the strand flora and probably could not survive on low islands.

Two of the new genera here described are flightless, which suggests that they evolved on the respective groups (Bonin and Palau) with wing degeneration or that they floated to the islands, although flightless insects may be carried in air currents. The wings in the Wake Atoll species are reduced, and the narrowing of the humeri in some of the other new species here described suggests reduction in flight muscles and perhaps nonuse of wings which have not yet been appreciably reduced. The jumping noted in one of these minute species may also suggest nonuse of wings. This jumping species was also taken in a light trap, but this does not necessarily prove it can fly.

Some of the discontinuous distribution demonstrated by this study may suggest inadequate collecting in intervening islands. Although this is surely true to some extent, species in many of the widespread genera attack familiar strand plants, and being nocturnal, are apt to be attracted to light and thus readily collected. The long series at hand of many of the following species suggests that perhaps not many additional kinds will be found, except in the Palau Islands, with a few in other Caroline Island groups, and perhaps the Bonin Islands. However, many additional island records may be expected for the Marshalls, the Gilberts, and the Caroline atolls, where collecting has been inadequate. For the better-collected island groups, future new records of widespread forms may suggest recent introduction by commerce. Certainly some of the species known to be widespread may have been transported by man, though probably not many in this family. Naturally more successful strand species, which attack halophytic plants on coasts swept with salt spray are more prone to survive transport by air currents and by floating in logs or trees in sea currents, with inevitable exposure to salt spray.

SYSTEMATICS

Key to Micronesian Subfamilies of Cerambycidae

1. Antenna not inserted close to base of mandible; larval head capsule not distinctly emarginate behind 2

   Antenna inserted close to base of mandible; prothorax margined laterally, margin often with teeth; anterior coxa strongly transverse; larval head capsule distinctly emarginate behind .... **Prioninae**

2. Anterior and middle tibiae not obliquely grooved preapically; head more or less obliquely inclined anteriorly; apical palpal segment blunt; larval head capsule broader than long..**Cerambycinae**
   Anterior tibia obliquely grooved internally, and middle tibia obliquely grooved externally; head more or less vertical in front or with mouth directed backward beneath; apical palpal segments acute; larval head capsule longer than broad ....**Lamiinae**

Subfamily PRIONINAE

Body large; antenna inserted close to base of mandible, not very long; prothorax broad, margined or toothed laterally.

Key to Micronesian Genera of Prioninae

1. Prothorax with a toothed or irregular lateral margin; head and prothorax together less than one-half as long as elytra; pronotum irregular.............**Olethrius**
   Prothorax with an even margin; head and prothorax together more than one-half as long as elytra; pronotum fairly flat...**Eurypoda**

Tribe MACROTOMINI

Genus **Olethrius** J. Thomson

Olethrius Thomson, 1860, Classif. Ceramb., 316 (type: *O. tyrranus* Thomson; Melanesia).—Lameere, 1912, Soc. Ent. Belgique, Mem. **21**: 129.

Body very large; mandible heavy, toothed internally in both sexes; prothorax transversely oblong in male with a partially smooth callus on each side of center, broadened posteriorly in female with callus more convex and irregular.

This genus is distributed in Melanesia, Micronesia, and central Polynesia (Samoa). Perhaps the Micronesian species reached the islands by floating in logs from Melanesia eastward in the counter-equatorial current, then floating westward through the Carolines in the equatorial current. If this is true, representatives might be expected in Ponape and Truk.

Key to Micronesian Species of Olethrius

1. Female with prothorax unevenly margined, with many small notches, and with posterior angles not very prominent and only slightly wider than breadth at middle; elytra coarsely punctured basally; pronotum of male with a triangular flattish and partly impunctate callus anterior to center............**carolinensis**
   Female with prothorax subevenly margined, with only a few indistinct notches, and with posterior angles prominent, acute, and distinctly wider than breadth at middle; elytra finely punctured basally, rather shiny..................................**glabrus**

1. **Olethrius carolinensis** (Matsushita), n. comb. (fig. 1, *b-e*).

   Rhaphipodus (*Rhaphipodus*) *carolinensis* Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2): 115 (Palau; type in Hokkaido Univ.).

   Olethrius sp., Gressitt, 1953, B. P. Bishop Mus., Bull. **212**: 67, 98 (Babelthuap).

Male: Blackish brown, somewhat pitchy on thorax and ventral surfaces, dark reddish brown on elytra.

Head coarsely rugose-punctate; mandible about as long as head, widened at middle and bearing one large tooth and at least one small one, besides apex. *Antenna* three-fourths as long as body; scape longer than next two segments combined. *Prothorax* with sides distinctly toothed, slightly convex and narrowed anteriorly; disc fairly even, closely rugose-punctate, a large, triangular, sparsely punctured callus on each side anterior to middle, a small, smooth triangle on midline near base, and a narrow, subbasal, smooth strip on each side. *Elytra* shallowly rugose-punctate, slightly shiny and moderately clothed with buff hairs.

Female: Antenna one-half as long as body, slender; pronotum swollen and smoother on each side just behind middle, with a postmedian impunctate strip and narrow, shiny basal strip; elytra coarsely rugose-punctate basally.

Length 42-56 mm., breadth 20-22 mm.

Larva: Large, body tapered in anterior half; prothorax much wider than deep. Head capsule, excluding mouthparts, about one-sixth broader than long, obtusely emarginate posteriorly, deeply grooved for muscle-insertion along middle of occiput to anterior to center; frontal suture indistinct; frons with two smooth cavities arranged obliquely on each side of median groove, and some small punctures; anterior margin of frons deeply recessed below post-condylar carina; antenna of three segments, the third blunt; three ocelli in a row below antenna. Pronotum largely rugulose-punctate, finely so on anterior zone, which is bordered behind by oblique rugae, middle zone paler and transversely rugose, with larger and sparser punctures, and posterior zone less punctured, irregularly rugose, and darker. Dorsal abdominal ampulla smooth, with two deep transverse grooves and without distinct tubercles, punctures, or corrugations. Length 100 mm. or more.

DISTRIBUTION: Western Caroline Is.

PALAU. BABELTHUAP: Ngiwal, Nov. 1951, larvae, pupae, and adults in rotting *Ceiba* stump, one adult found dead in crown of dying coconut palm, Gressitt; Ngerehelong, Dec. 1952; Ngarard, Aug. 1953, Beardsley. KOROR: Nov. 1951, Gressitt, Aug., Nov. 1952, Beardsley. NGARMALK: Dec. 1952, Gressitt (larva). PELELIU: Dec. 1947, Jan. 1948, Dybas.

YAP. YAP: Yap-Kolonia (Yaptown), Oct. 1949, Maehler, 1951, Owen.

HOSTS: Rotten stumps, including *Ceiba*.

2. **Olethrius glabrus** Gressitt, n. sp. (fig. 1, *a*).

Rhaphipodus carolinensis, Swezey (and Ehrhorn), 1940 (not of Matsushita), Hawaiian Ent. Soc., Proc. **10** (3): 362 (Kusaie).

Female: Dark reddish brown, in large part shiny; somewhat darker on head and last abdominal sternite.

Head coarsely rugose-punctate, finely granulose on frons; mandible slightly shorter than head, tapering, with an apical and a preapical tooth. *Antenna* nearly two-thirds as long as body, slender, tapering; scape distinctly punctured, slightly longer than next two segments combined. *Prothorax* trapezoidal, strongly narrowed anteriorly with posterior angle acute and prominent and anterior angle rounded; lateral margin only feebly indented, nearly even and slightly concave; disc swollen on each side of middle, with swelling sparsely punctured and shiny, and median strip and central portion of basal margin also largely impunctate. Scutellum broad, rounded, minutely punctured. *Elytra* rather smooth, feebly rugose, and shallowly punctured, glabrous. *Ventral surfaces* finely pubescent on metathorax, glabrous, nearly impunctate, and shiny on abdomen. *Legs* slender, shiny. Length 58 mm., breadth 23 mm.

Holotype, female (BISHOP 2378), Kusaie I., Jan. 1, 1939, C. McCall.
DISTRIBUTION: Eastern Caroline Is. (Kusaie).

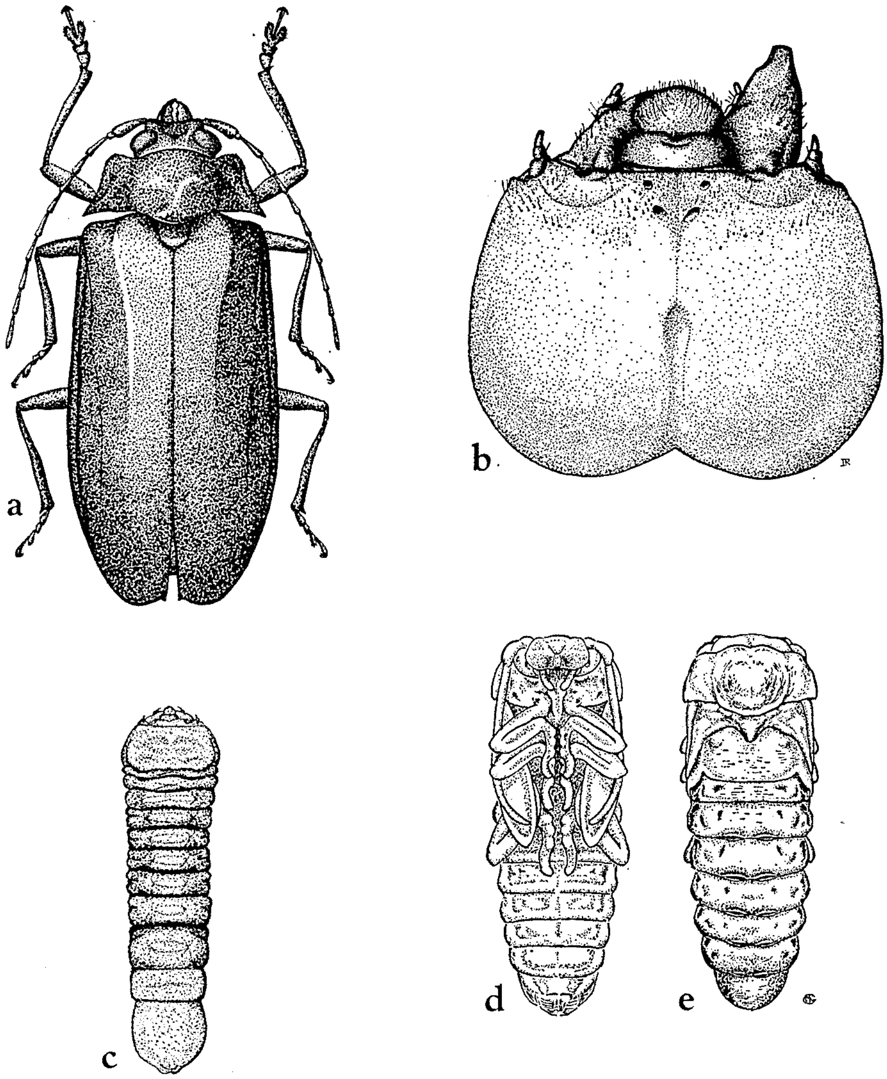


FIGURE 1.—a, *Olethrius glabrus*. b-e, *O. carolinensis*: *b*, head capsule of larva; *c*, larva, dorsal view; *d*, pupa, ventral view; *e*, pupa, dorsal view.

This species differs from *O. carolinensis* in being more glabrous and shiny, with the prothorax less closely punctured, less parallel-sided, less denticulate on margin, more produced and acute at posterior angle, and with the elytra

much smoother. It differs from *O. tyrranus* Thomson in having the prothorax with the lateral margin more even and the posterior angle more produced and the elytra smoother.

Tribe EURYPODINI

Genus **Eurypoda** W. Saunders

Eurypoda Saunders, 1853, Ent. Soc. London, Trans. II, **2**: 109 (type: *E. antennata* Saunders).

Neoprion Lacordaire, 1869, Gen. Col. **8**: 131 (type: *N. parandraeformis* Lacordaire).

3. **Eurypoda** sp.?

A species, possibly of this genus, was illustrated [Matsukawa-nokogiri-kamikiri, Takeuchi, 1936, Ent. World, Tokyo **4**: 271, pl. 145, fig. 5 (Haha Jima)] but was named only in Japanese. I have seen no specimens, but an endemic form may be involved. Length 30 mm.

DISTRIBUTION: Bonin Is. (Haha Jima).

Subfamily CERAMBYCINAE

Head obliquely inclined anteriorly; apical palpal segments blunt; mesonotal stridulatory area not divided; anterior and middle tibiae not obliquely grooved.

Key to Micronesian Tribes of Cerambycinae

1. Eyes coarsely facetted 2
   Eyes finely facetted, but coarsely facetted in *Ogasawara* (Molorchini) 6

2(1). Middle coxal cavity open externally to epimeron 3
   Middle coxal cavity closed externally to epimeron 4

3(2). Intercoxal process of prosternum broad, widened and thickened posteriorly .... **Cerambycini**
   Intercoxal process of prosternum narrow, not widened and thickened posteriorly .... **Hesperophanini**

4(2). Antennal segments not spined distally 5
   Some of basal antennal segments spined endoapically .... **Phoracanthini**

5(4). First abdominal segment normal, not as long as remaining combined.. **Callidiopini**
   First abdominal segment large, as long as remaining combined .... **Obriini**

6(1). Middle coxal cavity open externally to epimeron 7
   Middle coxal cavity closed externally to epimeron .... **Glaucytini**

7(6). Anterior coxal cavity angulate externally; elytra generally abbreviated; hind femora strongly pedunculate-clavate; head oblique in front .... **Molorchini**
   Anterior coxal cavity rounded, without an external angle; elytra not abbreviated; head more or less vertical in front .... **Clytini**

Genus **Hoplocerambyx** J. Thomson

Hoplocerambyx Thomson, 1864, Syst. Ceramb., 229 (type: *Hammaticherus spinicornis* Newman; southeast Asia).

Species of this genus are largely glabrous above and have the antenna subglabrous and spined internally in the male, but the spines are minute or lacking in the following species. The genus is found in southeast Asia, to Waigiou, the Philippines, and Palau.

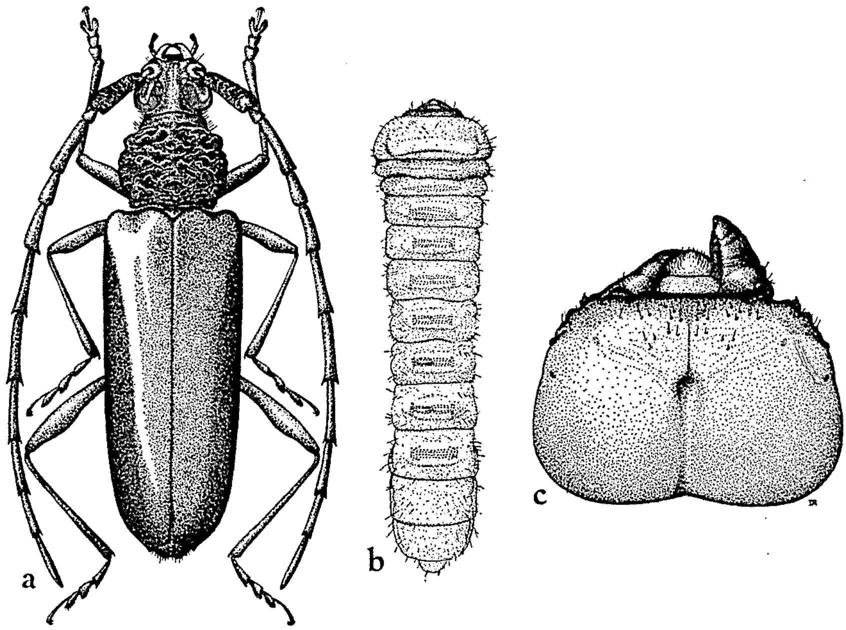


FIGURE 2.—*Hoplocerambyx inhirsutus:* **a**, adult female; **b**, larva, dorsal view; **c**, head capsule of larva.

4. **Hoplocerambyx inhirsutus** (Matsushita), n. comb. (fig. 2).

Aeolesthes inhirsutus Matsushita, 1931, Ins. Matsumurana **6** (4) : 170, fig. 2 (Koror, Palau; type in Hokkaido Univ.).

Hoplocerambyx brevispinis Gressitt, 1951, Ent. Soc. Am., Ann. **44** (1) : 8 (Palau; type in U. S. Nat. Mus.); new syn.

Male: Shiny pitchy black; reddish brown on femora and posterior portions of elytra. Body largely glabrous above, with moderate pale pubescence on scutellum, base of prothorax, parts of head and thoracic sterna; pubescence very sparse on abdomen.

Head with two deep grooves on vertex. *Antenna* more than twice as long as body; scape rugose; third and fourth segments thicker than following and somewhat swollen distally. *Prothorax* rounded at side, narrowed distally, coarsely rugose on disc, mostly in a transverse direction. *Elytra* minutely punctured, each narrowly truncate apically.

Female: Antenna slightly longer than body.

Length 28-47 mm.; breadth 7-13 mm.

Larva: Body slender and cylindrical, slightly flattened on thorax. Head capsule, excluding mouthparts, more than one-half again as broad as long, feebly emarginate posteriorly, pale except for anterior margin; right mandible slightly emarginate at apex, with a single bluntly rounded tooth on upper cutting edge and some horizontal and vertical grooves on side; frons with very few punctures and some feeble oblique ridges; antenna short, with first segment stout and second and third very slender; three ocelli arranged vertically below antenna; a vertical ridge some distance behind ocelli. Pronotum pale, with scattered erect hairs before and behind a transverse reddish area with feeble punctures just anterior to middle; posterior portion of disc with subregular longitudinal grooves. Dorsal abdominal ampullae each with two transverse grooves bordered on each side of both with large, spaced tubercles, a few on outer side of sublateral longitudinal groove. Thoracic legs distinct.

DISTRIBUTION: Western Caroline Is.

PALAU. BABELTHUAP: Two, Ulimang, Dec. 1947, Dybas. KOROR: Nov. 1947, Jan. 1948, Dybas, Mar. 1948, Maehler, Aug. 1949, Langford, July, Sept. 1951, Dec. 1952, Gressitt, Jan., Mar. 1953, Beardsley. PELELIU: Feb. 1948, Dybas, Sept. 1951, Gressitt. ANGAUR: Dec. 1951, Gressitt.

HOSTS: Breeds in dead *Ceiba* (kapok) and probably also *Ficus,* but larvae of members of this tribe often bore in living trees.

TRIBE HESPEROPHANINI

Genus **Stromatium** Serville

Stromatium Serville, 1834, Soc. Ent. France, Ann. **3**: 80 (type: *Callidium barbatum* L.; southern Asia).

Selenophorus Mulsant, 1839, Col. France Long., 65 (type: *Callidium strepens* Fabr. = *fulvum* Villers; southern Europe).

Vertex subacutely raised at antennal insertions; antenna strongly fringed internally; pronotum bearing callosities; lower side of prothorax with a deep, hairy cavity in male; elytra parallel-sided, unevenly punctured.

This genus is primarily Oriental, but it has representatives in North and South America and the Mediterranean area.

5. Stromatium longicorne (Newman). (Figure 3, *a.*)

Arhopalus longicornis Newman, 1842, Entomologist **1**: 246 (Manila).

Stromatium asperulum White, 1855, Cat. Col. Brit. Mus. **8**: 300 (Hong Kong).

Stromatium longicorne, Gahan, 1906, Fauna of India, Col. Ceramb., 115.—Kano, 1930, Biogeogr. Soc. Japan, Bull. **1** (3): 242 (Bonins).—Gressitt, 1940, Philippine Jour. Sci. **72**: 50 (Hainan); 1951, Longicornia **2**: 150, pl. 4, fig. 5.

Male: Dull reddish brown. Body clothed with gray pubescence and some erect hairs. *Head* coarsely granulose-punctate, deeply impressed between upper eye-lobes. *Antenna* nearly twice as long as body; fourth segment not quite as long as third or fifth. *Prothorax* transverse; disc coarsely rugulose-punctate, with five swellings forming an "M." *Elytra*

each subtruncate apically with sutural angle finely toothed; disc granulose-punctate with large asperate punctures arranged subseriately in part.

Female: Antenna as long as body.

Length 14-16 mm., breadth 3.75-7.8 mm.

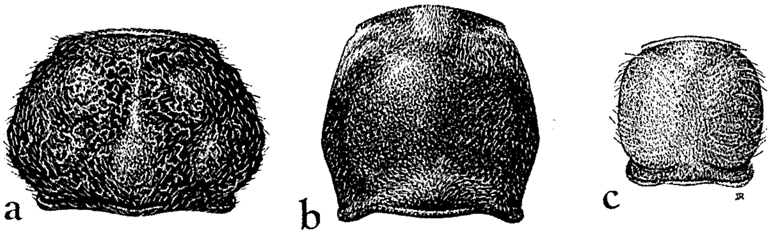


FIGURE 3.—Dorsal view of prothorax: a, *Stromatium longicorne;* b, *Allotraeus (Nysina) boninensis;* c, *Curtomerus flavus.*

DISTRIBUTION: Assam, Burma, southeast Asia, Indonesia, Philippines, Hainan, southern China, Taiwan, Ryukyu Is., Bonin Is.

BONIN IS. Recorded by Kano without specific island record. No additional material.

TRIBE PHORACANTHINI

Genus **Allotraeus** Bates

Allotraeus Bates, 1887, Ent. Monthly Mag. **14**(2): 37 (type: *A. sphaerioninus* Bates).

Nysina Gahan, 1906, Fauna of India, Col. Ceramb., 153 (type: *Sphaerion orientalis* White).

Pseudallotraeus Pic, 1923, Mélanges Exot. Ent. **38**: 13 (type: *P. rufescens* Pic).—Gressitt, 1937, Kontyû **11** (4): 317.

Neosphaerion Schwarzer, 1925, Ent. Blätter **21** (1): 21 (type: *N. asiaticum* Schwarzer).

This genus is characterized by the dorsally grooved and endoapically spined basal antennal segments. The genus is Oriental, and the typical subgenus is Japanese. The subgenus *Nysina* (of which *Pseudallotraeus* and *Neosphaerion* are synonyms) is primarily Indo-Chinese and is characterized by pedunculate femora and by several basal antennal segments being grooved.

6. Allotraeus (Nysina) boninensis (Gressitt), n. comb. (fig. 3, *b*).

Pseudallotraeus boninensis Gressitt, 1937, Kontyû **11**(4): 319, fig. 1 (Bonins; type in Calif. Acad. Sci.).

Female: Reddish brown, largely clothed with thin golden-buff pubescence; legs more glabrous, with femoral clubs shiny.

Head finely granulose, narrower than prothorax; frons short and depressed. *Antenna* (incomplete) about one-half again as long as body; scape rugose, shorter than third segment; third to seventh (at least) flattened and grooved above; third and fourth strongly spined endoapically; fifth and sixth briefly spined; third distinctly longer than fourth; fourth to seventh subequal in length. *Prothorax* as broad as long, obtusely rounded at each side; disc slightly irregular and rugulose-punctate, with a smoothish postmedian stripe. *Elytra* somewhat deeply and subasperately punctured basally, more finely so apically; each narrowed and obliquely truncate apically with a slightly produced outer angle. Length 18.5 mm., breadth 4.6 mm.

DISTRIBUTION: Bonin Is. Known only from unique type without exact data.

Tribe CALLIDIOPINI

Key to Micronesian Genera of Callidiopini

1. Body, as well as appendages, clothed with rather long, suberect hairs; third antennal segment longer than scape........ 2
   Body and appendages almost without erect hairs, except for a few on ventral surface of basal portion of antenna; third antennal segment very rarely longer than scape........ 3

2(1). Prothorax longer than broad; pronotal disc concentrically striate-punctate; fourth antennal segment distinctly shorter than fifth; femora pedunculate; body testaceous, shiny........ **Curtomerus**
   Prothorax much broader than long; pronotal disc finely pubescent, irregularly rugose or granulose; fourth and fifth antennal segments equal in length; femora flattened; body dark pitchy brown, dull........ **Geloneatha**

3(1). Antenna generally much less than twice as long as body in male; third segment at most very little longer than scape; hind femur not reaching elytral apex........ **Ceresium**
   Antenna fully twice as long as body in male; third segment much longer than scape; hind femur exceeding elytral apex........ **Examnes**

Genus **Curtomerus** Stephens

Cylindera Newman, 1833, Ent. Mag. **1**: 509 (type: *C. pallida* Newman=*flava* Fabr.). (Not of Westwood, 1831.)

Curtomerus Stephens, 1839, Man. Brit. Col., 275 (type: *C. lutea* Stephens=*flava* Fabr.).

Lampromerus Thomson, 1860, Classif. Ceramb., 202 (type: *Cerambyx pilicornis* Fabr.=*flava* Fabr.).

Sotenus Sharp, 1878, Ent. Soc. London, Trans. **1878**: 205 (type: *S. setigera* Sharp=*flava* Fabr.).

This genus is characterized by members with flattened antennae, the prothorax flattened on the disc and constricted basally, and the elytra relatively shorter than in *Ceresium*. The femora are distinctly pedunculate-clavate. The genus contains two species, both probably native to Central America.

7. **Curtomerus flavus** (Fabr.). (Figure 3, *c.*)

Callidium flavum Fabr., 1775, Syst. Ent., 191 (America; type in British Museum).

Callidium pilicorne Fabr., 1792, Ent. Syst. **1** (2) : 327 (West Indies).

Cylindera pallida Newman, 1833, Ent. Mag. **1** : 510.

Curtomerus luteus, Stephens, 1839, Man. Brit. Col., 275 (England).

Sotenus setiger Sharp, 1878, Ent. Soc. London, Trans. **1878** : 205 (Oahu).

Ceresium impuncticolle Fairmaire, 1881, Soc. Ent. France, Ann. VI, **1** : 473.

Cylindera flava, Aurivillius, 1912, Coleopt. Cat. **39** : 120.—Blair, 1934, B. P. Bishop Mus., Bull. **114** : 273.—Gressitt, 1951, Ent. Soc. Am., Ann. **44** (1) : 10 (Bonins).

Ceresium simile, Kano (not of Gahan), 1930, Biogeogr. Soc. Japan, Bull. **1** (3) : 242, pl. 15, fig. 2 (Bonins).

Trinophylum boninense Matsumura and Matsushita, 1932, Ins. Matsumurana **7** : 72, fig. 5; new syn.

Trinophylum barbatum Matsushita and Oobayashi, 1938, Sapporo Nat. Hist. Soc., Trans. **15** (3) : 197, fig.; new syn.

Biology: Schiødte, 1876, Naturhist. Tidsskr. III, **10** : 409, pl. 13, figs. 20-22.—Duffy, 1953, Hawaiian Ent. Soc., Proc. **15** (1) : 146.

Male: Testaceous; somewhat more reddish brown on head and prothorax. Body largely clothed with fine, erect, pale hairs. *Antenna* slightly longer than body, flattened beyond second segment; third segment a little longer than both scape and fourth segment. *Prothorax* rounded at sides, constricted and briefly cylindrical at base; disc flattened and feebly punctured, sometimes with minute grooves radiating backward from center. *Elytra* closely punctured, largely in regular rows except for some irregularity near suture.

Female: Antenna slightly shorter than body.

Length 5.8-12 mm., breadth 1.85-3.1 mm.

DISTRIBUTION: Florida, Antilles, Mexico, Guiana, England, Hawaii, Tahiti, Raiatea, Marquesas, Bonins, Hachijo I.

BONIN IS. CHICHI JIMA: One (Agric. Tokyo), July 1932, Motoike and Ise. I have seen the type of *boninense.*

Another specimen in the National Institute of Agricultural Science (Tokyo) collection is from Hachijo Island, north of the Bonins.

HOSTS: Possibly *Xylosma* (Blair) and possibly *Cocos* (specimen from Hachijo I.); *Nicotiana* (Hawaii, Bridwell).

Genus **Ceresium** Newman

Ceresium Newman, 1842, Entomologist **1** : 322 (type: *C. raripilum* Newman; Philippines).—Gahan, 1906, Fauna of India, Col. Ceramb., 156.

Diatomocephala Blanchard, 1853, Voy. Pôle Sud., Zool. **4** : 266 (type: *D. maculaticollis* Blanchard).

Rhaphidera Perris, 1855, Soc. Linn. Lyon, Ann. II, **2**: 336.

Pneumida Thomson, 1864, Syst. Ceramb., 191 (type: *P. argenteofasciata* Thomson; East Indies).

Paraceresium Matsushita, 1932, Ins. Matsumurana **7** (1-2): 71 (type: *P. saipanicum* Matsushita; Saipan); weak subgenus.

Ceresium is a heterogeneous assemblage. In general, the elytra are elongate, the prothorax is about as broad as long (though sometimes broader than long and sometimes much longer than broad) and usually has some callosities or raised lines on the disc; and the antenna is rarely much longer than the body. This genus is dominant in many of the oceanic island areas of the Pacific and extends to Japan, Australia, and Madagascar, but it is not so well represented on the Asiatic mainland.

Ceresium sinicum White was recorded from the Bonins by Matsumura (Kano, 1930, Biogeogr. Soc. Japan, Bull. **1**: 242), but probably the form involved was *C. simile* Gahan or *C. signaticolle* Matsumura and Matsushita.

Key to Micronesian Species of Ceresium

1. Pronotum even, regularly and closely punctured and without callosities except, rarely, an incomplete postmedian impunctate line present; mesosternum gradually sloped anteriorly (subgenus *Ceresiellum*)................ 2

Pronotum not entirely even, irregularly punctured or with nodes, callosities, or raised lines; mesosternum generally vertical anteriorly or tuberculate (*Ceresium*, s. str., except for bract, 8 [b].. 4

2(1). Prothorax broader than long, very briefly constricted basally; disc flattish.... 3

Prothorax longer than broad, strongly constricted basally; disc distinctly convex; third antennal segment as long as scape; Palau, Yap..........**planatum**

3(2). Prothorax rounded-obtuse at sides; pronotal punctures minute, much smaller than most of elytral punctures; third antennal segment shorter than scape; Gilberts and eastward..**olidum**

Prothorax somewhat unevenly rounded at side; pronotal punctures shallow, slightly larger than elytral punctures; third antennal segment longer than scape; S. Mariana Is..**usingeri**

4(1). Antenna of male generally less than one-fourth again as long as body...... 5

Antenna of male three-fourths again as long as body; pronotum very finely pubescent, irregularly punctured, with three subparallel postmedian ridges, and low nodes at side; Kusaie..**clarkei**

5(4). Prothorax distinctly broader than long; body fairly stout................................ 6

Prothorax longer than broad to slightly broader than long; body not very stout..12

6(5). Pronotum with each side subglabrous or bearing only two large distinct areas of dense pubescence.. 7

Pronotum with each side largely pubescent, glabrous only on raised smooth areas 8

7(6). Pronotum without areas of dense pubescence, with single hairs in large punctures except for a thin patch near posterior angle; body stout, pitchy; Arno ....**robustum**

Pronotum with two dense areas of yellowish pubescence on each side; disc with some large punctures and some impunctate areas; body pale reddish brown; Yap..**guttaticolle yapensis**

8(6). Elytral hairs longer than spaces between punctures; pronotal disc not nearly glabrous or nearly impunctate.......... 9
Elytral hairs shorter than spaces between punctures; pronotal disc shiny, nearly glabrous and nearly impunctate; body, including femora, quite red; Saipan (subgenus *Paraceresium*).......... **saipanicum**

9(8). Elytral punctures fine, about 10 in a hypothetical row between suture and middle; pronotal punctures small, or partly small, and with impunctate areas on disc; an oblique impunctate strip on each side of basal half of pronotum.......... 10
Elytral punctures strong, less than 10 in a hypothetical row between suture and middle; pronotal punctures fairly large and uniform; impunctate strip on each side of basal half of pronotum longitudinal or irregular, not distinctly oblique.......... 11

10(9). Pronotal pubescence yellow, fairly dense on basal portion except for three narrow smooth strips, the lateral ones oblique; pronotal disc uneven, with a few large punctures and a few small ones; pronotum bright orange brown, pitchy anteriorly, elytra tawny; Guam.......... **guamum guamum**
Pronotal pubescence yellowish gray, not dense between oblique smooth strips; pronotal disc fairly even, with many small punctures; pronotum and elytra fairly dull reddish brown; Rota.......... **guamum rotanum**

11(9). Pronotum distinctly convex in center, with an oblique depression on each side and large, flat-bottomed, round punctures of equal size; side of abdomen not much more sparsely pubescent than metasternum; Ponape.......... **casilelium**
Pronotum not evenly convex in center, lacking an oblique depression on each side, and with punctures of different sizes and not flat-bottomed; side of abdomen much more sparsely pubescent than metasternum; Palau.......... **yoshinoi**

12(5). Prothorax distinctly longer than broad, cylindrical or evenly rounded at side.......... 13
Prothorax not distinctly longer than broad, about as long as broad, not very even at side.......... 14

13(12). Prothorax evenly rounded at side; disc even, regularly and not very heavily punctured on each side of median line; elytral punctures very deep, larger than pronotal punctures; body reddish; Palau.......... **nanyoanum**
Prothorax cylindrical, with a triangular black discal spot and coarse, rugose punctures; elytral punctures smaller than pronotal punctures; body largely blackish; Bonins.......... **signaticolle**

14(12). Pronotal disc rugose or coarsely punctured, largely subglabrous, without three subparallel, longitudinal raised lines on basal half separated by pubescence.......... 15
Pronotal disc irregularly punctured, rarely somewhat rugose, with three more or less parallel, longitudinal raised lines on basal half separated by pubescence, which is in part dense or covers entire disc.......... 18

15(14). Elytral punctures dense, about 10 in a hypothetical row from suture to center; elytra testaceous or pitchy red with distinct grayish pubescence.... 16
Elytral punctures large and well spaced, eight or less in a hypothetical row from suture to center; elytra reddish brown with sparse hairs.......... 17

16(15). Pronotal disc coarsely rugose; scape shorter than third antennal segment; prothorax slightly longer than broad; elytral hairs much longer than spaces between punctures; elytra pitchy reddish with grayish pubescence; Bonins.......... **simile**
Pronotal disc coarsely and shallowly punctured, with some punctures confluent; scape longer than third antennal segment; prothorax barely broader than long, uneven at side; body pale testaceous; Truk...... **testaceum**

17(15). Pronotum nearly glabrous; punctures of pronotal disc mostly distinct and more or less rounded; Ponape.......... **adamsi adamsi**
Pronotum with sparse hairs as well as patches of denser pubescence; punctures of pronotal disc partly confluent, sparser than in preceding, with broader raised interspaces; Kusaie.......... **adamsi kusaianum**
18(14). Dorsum reddish brown with pubescence inconspicuous; pronotal disc with pubescence sparse or brief; pubescence on abdomen fairly sparse.......... 19
Dorsum dark reddish brown with distinct grayish pubescence; pronotal disc with pubescence extensive and fairly close, often covering basal half or more; pubescence on abdomen more or less dense.......... 20
19(18). Fifth antennal segment longer than third; pronotal disc with hairs long, but sparse and interpunctural areas not finely punctured; Palau...... **yoshinoi**
Fifth antennal segment not longer than third; pronotal disc with hairs very fine and short and interpunctural areas finely punctured; S. Marianas.......... **sublucidum**
20(18). Fifth antennal segment longer than third; pronotal disc coarsely and evenly punctured; vertex finely punctured; pubescence on abdomen dense.......... **unicolor unicolor**
Fifth antennal segment not longer than third; pronotal disc coarsely rugose and unevenly punctured; vertex deeply punctured; pubescence on abdomen only moderately dense.......... **unicolor marshallum**

Subgenus **Ceresiellum** Gressitt, new subgenus

Head short; vertex nearly level between antennal supports, not distinctly grooved. Antenna slender, about one-half again as long as body in male; third and fourth segments subequal in length. Prothorax depressed, generally broader than long, regularly and finely punctured, without nodes or callosities. Mesosternal intercoxal process plain, gradually sloped anteriorly, emarginate apically.

Type: *Hesperophanes olidus* Fairmaire (*Ceresium olidum*).

Range: Polynesia and Micronesia.

8. **Ceresium (Ceresiellum) olidum** (Fairmaire).

Hesperophanes olidus Fairmaire, 1850, Rev. Mag. Zool. II, 2:63 (Viti; type in Paris Mus.).

Ceresium olidum, Fairmaire, 1881, Soc. Ent. France, Ann. VI, **1**:472 (Raiatea, Tahiti).—Dillon and Dillon, 1952, B. P. Bishop Mus., Bull. **206**:26.

Female: Pale reddish brown; slightly darker on pronotum and slightly paler on legs. Body thinly clothed with recumbent short golden-buff hairs. *Head* closely and finely punctured, nearly level between antennal supports. *Antenna* slender, barely longer than body; fourth segment barely longer than third, slightly shorter than scape; fifth longer than scape; fifth to last decreasing slightly in length. *Prothorax* slightly broader than long, somewhat rounded at each side, depressed; disc even, closely and finely punctured throughout. *Elytra* slightly narrowed in middle, rounded apically; each somewhat deeply and rather closely punctured, the punctures becoming smaller near apex. *Ventral surfaces* finely granulose to finely punctured. *Legs* slender. Length 6.3 mm., breadth 1.6 mm.

DISTRIBUTION: Tahiti, Fiji, Gilbert Is.

GILBERT IS. Butaritari (Makin) Atoll: One (BISHOP), June 1944, Enke.

9. Ceresium (Ceresiellum) planatum Gressitt, n. sp. (fig. 4, *a*).

Female: Reddish brown, darker on thoracic sternites; antenna and legs pale ochraceous. Body clothed with sparse pale-buff hairs which are inconspicuous on pronotum; antenna briefly clothed.

Head shallowly subreticulate-punctate, nearly horizontal between antennal supports, somewhat swollen and declivitous on frons. *Antenna* slender, slightly longer than body; scape slightly compressed, arched basally; third segment nearly as long as scape, slightly longer than fourth; fifth nearly one-half again as long as third; fifth to tenth decreasing slightly in length; eleventh barely longer than tenth. *Prothorax* slightly longer than broad, obtusely convex at side; disc slightly uneven, with a depression above middle of side; regularly and shallowly reticulate-punctate, with a slightly raised point in center of each puncture. Scutellum obtusely rounded. *Elytra* slender, parallel; each rounded apically with disc somewhat deeply punctured, the punctures becoming gradually finer toward apex. Metepisternum finely granulose; metasternum subclosely punctured; abdomen more sparsely punctured. *Femora* somewhat flattened, gradually clavate; tarsi slender. Length 7 mm., breadth 1.75 mm.

Paratypes: Length 5.4-6.5 mm., breadth 1.3-1.6 mm.

Male: Antenna one-half again as long as body. Length 6.6 mm., breadth 1.6 mm.

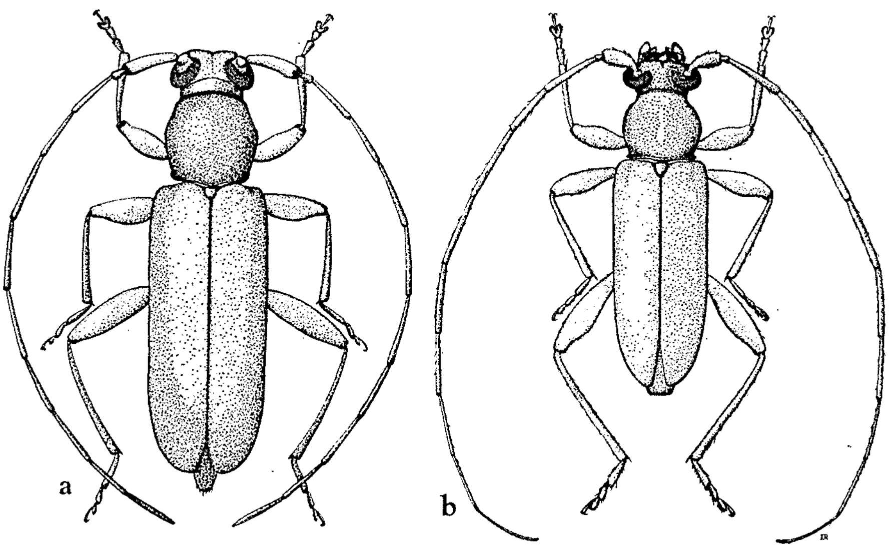


FIGURE 4.—**a,** *Ceresium (Ceresiellum) planatum;* **b,** *C. (C.) usingeri.*

Holotype, female (US 62570), beaten from vegetation, wooded peak southwest of Ulimang, Babelthuap I., Palau Is., Dec. 20, 1947, H. S. Dybas; allotype, male (US), Koror, Jan. 12, 1948; paratopotype, female (BISHOP). Paratypes (CM): Koror, Nov. 30, 1947 and Jan. 17, 1948 (Limestone Ridge, south of inlet, southeast Koror), Dybas; (US), Koror, Mar. 8, 1949, K. L. Maehler.

One specimen (BISHOP), hill behind Kolonia (Yaptown) [lower part of Mt. Madaade], Yap I., Yap, Nov. 28, 1952, Gressitt; another (US), Kolonia, Yap, Mar. 1-8, 1949, Maehler.

DISTRIBUTION: Western Caroline Is.

This species differs from *C. olidum* in being narrower, with the third antennal segment as long as the scape and the prothorax less flattened, less transverse, less obtuse laterally, and shallowly reticulate-punctate instead of minutely punctured.

10. Ceresium (Ceresiellum) usingeri Gressitt, n. sp. (fig. 4, *b*).

Male: Reddish brown, slightly paler on antenna and ochraceous on legs. Body moderately clothed with pale-buff hairs.

Head short; shallowly subreticulate-punctate; eyes close to bases of mandibles and much closer above than antennal insertions. *Antenna* nearly twice as long as body, slender; scape finely punctured, slightly shorter than third segment; third barely longer than fourth, shorter than fifth; fifth to last decreasing slightly in length. *Prothorax* fully as broad as long, unevenly rounded at side; disc fairly even, very shallowly subreticulate-punctate, the punctures with raised centers; a postmedian smooth stripe and a few sparsely punctured areas. *Elytra* narrowed posteriorly; apex of each rounded externally and obtuse at sutural angle; disc rather finely punctured throughout. *Ventral surfaces* finely granulose on metepisternum, finely punctured on sides of metasternum and abdominal sternites. *Legs* slender. Length 9.5 mm., breadth 2.4 mm.

Female: Antenna one-half again as long as body. Length 9.1 mm., breadth 2.4 mm.

Paratypes: Length 5.7-8.1 mm., breadth 1.5-2.3 mm.

Holotype, male (BISHOP 2379), Machanao, northern Guam, June 30, 1936, R. L. Usinger; allotopotype, female (BISHOP), same data as for holotype, but June 5; paratopotype, female, same data as for holotype; paratype, female (CAS), Pt. Ritidian, northern Guam, July 1945, G. Bohart and Gressitt.

One specimen (CM), As Mahetog, Saipan, June 8, 1945, Dybas; one (US), Saipan, Jan. 17, 1945, E. Hagen. Two (one US), Mt. Lasso, Tinian I., Mar.-Apr. 1945, Dybas; one Lake Hagoya, Tinian, June 1946, Townes. One (CM), southeastern part Rota I., Oct. 22, 1945, W. L. Necker. Most, or all, of the specimens were taken in limestone areas.

DISTRIBUTION: Southern Mariana Is.

This species differs from *C. olidum* in being broader, with the elytra less parallel, with the antenna longer in the male, with the third and fourth segments longer than the scape, with the pronotal disc less completely punctured, and with the hind femur longer.

Subgenus **Paraceresium** Matsushita

11. Ceresium (Paraceresium) saipanicum (Matsushita), n. comb. (fig. 5, *a*).

Paraceresium saipanicum Matsushita, 1932, Ins. Matsumurana **7**: 71, fig. 4 (Saipan; type in Hokkaido Univ.).

Male: Shiny reddish castaneous, slightly more brownish on elytra and more ochraceous on femora; scutellum, tibiae, and inner and outer edges of antenna somewhat pitchy.

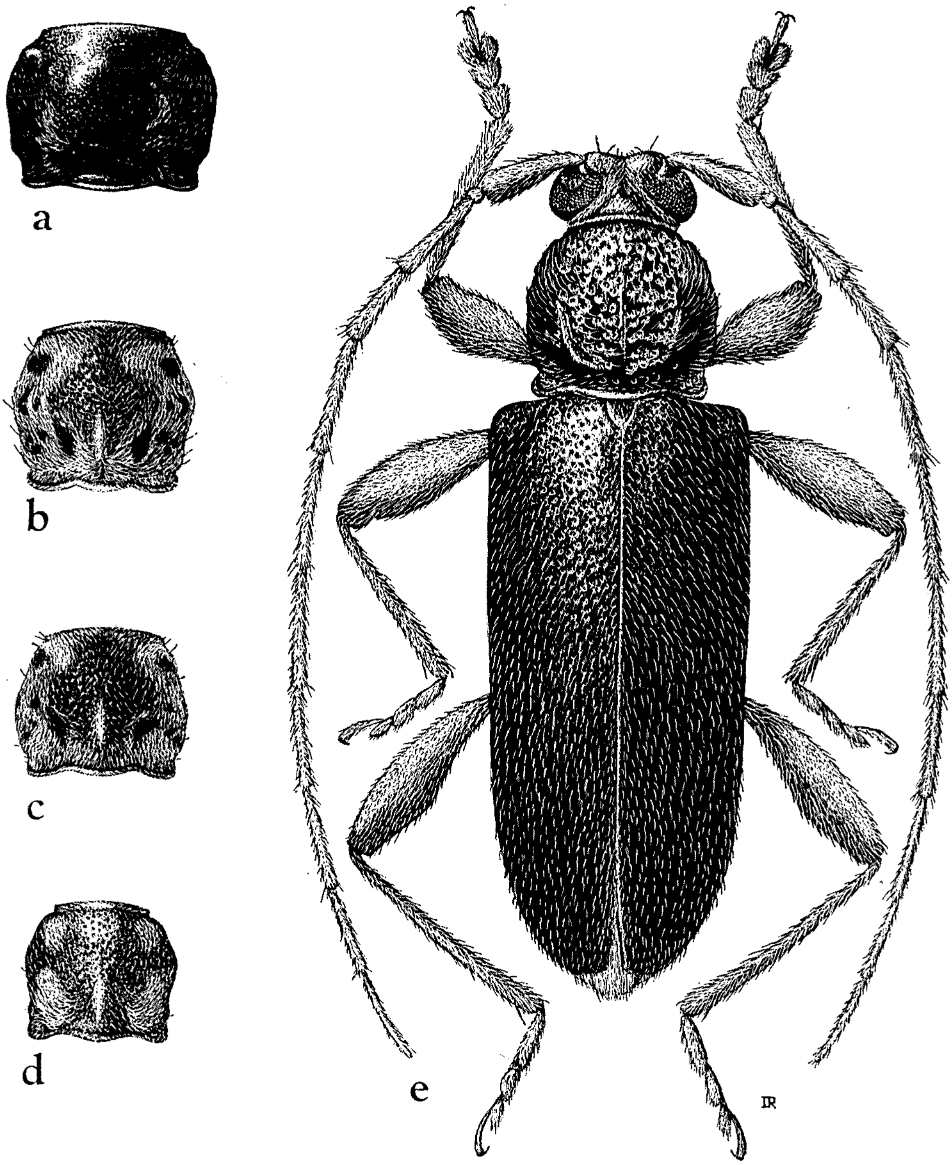


FIGURE 5.—**a**, *Ceresium* (*Paraceresium*) *saipanicum*, dorsal view of prothorax; **b**, *Ceresium* (*s. str.*) *guamum guamum*, dorsal view of prothorax; **c**, *C.* (*s. str.*) *guamum rotanum*, dorsal view of prothorax; **d**, *C.* (*s. str.*) *guttaticolle yapense*, dorsal view of prothorax; **e**, *C.* (*s. str.*) *robustum*.

Pronotum and elytra with very sparse short adpressed hairs; side of pronotum with a band of golden pubescence; ventral surfaces with sparse grayish-buff pubescence.

Head broad, somewhat finely and deeply punctured. *Antenna* one-fourth longer than body, somewhat flattened; scape as long as next two segments combined; third and fourth subequal; fifth longer; fifth to tenth gradually shorter; last narrowed apically. *Prothorax* large, broader than long, shiny and nearly impunctate on disc; side with two distinct glabrous swellings, one at middle and one anterior to middle. *Elytra* finely and not very deeply punctured; each narrowly truncate apically. *Femora* swollen and flattened. Length 15 mm., breadth 4.3 mm.

Female: Antenna one-sixth longer than body. Length 13.5-16 mm., breadth 3.7-4.65 mm.

DISTRIBUTION: Mariana Is.

S. MARIANA IS. SAIPAN: Four, As Mahetog area, Apr. 1945, Dybas, Sept. 1945, Ducoff; two, Mt. Tapotchau, Feb. 25, 1949, Maehler (US, CM, BISHOP).

Subgenus **Ceresium** s. str.

12. **Ceresium (Ceresium) clarkei** Gressitt, n. sp. (fig. 6, *a*).

Male: Reddish brown; more reddish on pronotum, darker beneath, and antenna paler distally. Body irregularly clothed with pale, silvery-buff pubescence: sparse on head and scape, thin and close on remainder of antenna, very sparse on pronotal disc, fairly close on side of prothorax, sparse on elytra, close on sides of thorax and abdomen, nearly glabrous along middle of undersides and on part of side of each abdominal segment, moderately close on legs.

Head finely punctured and shallowly concave between antennal supports. *Antenna* three-fourths again as long as body; scape nearly as long as third segment, finely punctured; fourth very slightly shorter than third; fifth distinctly longer than second and third combined, equal to sixth, seventh, and last; seventh to tenth decreasing slightly in length. *Prothorax* very slightly broader than long, broader at base than at apex; side subevenly rounded; disc moderately even, with center and a postmedian line slightly raised, a few low nodes at side, and punctures of irregular sizes, in part small and close. *Elytra* long, gradually narrowed; disc of each finely and closely punctured, subasperately so basally, the punctures at middle equal to smaller pronotal punctures. *Ventral surfaces* finely punctured. *Legs* moderately slender. Length 14.5 mm., breadth 3.4 mm.

Female: Antenna one-half again as long as body. Length 10.2 mm., breadth 2.3 mm.

Paratypes: Length 11.5-16.5 mm., breadth 3-4.15 mm.

Holotype, male (US 62571), "Hill 1010," southeast of Mt. Matante, alt. 300 m., northern Kusaie, in light trap, Apr. 13, 1953, J. F. G. Clarke; allotype, female (US), Mwot, Kusaie, Apr. 10, 1953, Clarke; eight paratypes (US, BISHOP, CAS, BM), light trap, Apr. 13, Clarke.

DISTRIBUTION: Eastern Caroline Is. (Kusaie).

This species differs from *C. scutellaris* Dillon and Dillon in having the antennal supports more compressed; the scape more finely punctured; the pronotum less densely punctured, less shiny, and with much finer and sparser pubescence; the elytra more finely punctured and with smaller hairs; and the hind femur shorter.

13. Ceresium (Ceresium) guamum guamum Gressitt, n. sp. (fig. 5, *b*).

Ceresium guttaticolle, Zimmerman and Swezey (not of Fairmaire), IN Gressitt, 1942, B. P. Bishop Mus., Bull. **172**: 63 (Guam).—Gressitt, 1951, Ent. Soc. Am., Ann. **44** (1): 12 (Guam).

Male: Largely dark reddish brown above, paler on center of pronotum, slightly pitchy on parts of head, apical and basal borders of prothorax, and elytral apex; ventral surfaces and legs pitchy with bases of femora and distal portions of tarsi somewhat reddish. Body extensively clothed with grayish-white hairs and with some yellowish pubescence: head clothed with yellowish around upper eye-lobe and with dense yellow pubescence along each side of pronotum, interrupted only by a few raised areas and merging with grayish pubescence on lower side; scutellum somewhat densely yellowish-white pubescent; elytra with a moderately long, adpressed, buffy-white hair arising from each puncture; ventral surfaces irregularly pubescent: close, yellowish-white pubescence on metapleura and sparser, longer, and more erect hairs on sternites.

Head rather finely punctured, very slightly concave between antennal supports. *Antenna* nearly one-fourth again as long as body; scape stout; fifth segment slightly longer than third, distinctly longer than fourth. *Prothorax* slightly broader than long, irregular convex at side; pronotal disc convex, more strongly raised on each side of, and just behind, center, sparsely but distinctly punctured; an obliquely longitudinal raised line at each side of basal half of disc, elytra long, tapering with fine, slightly asperate punctures. *Ventral surfaces* finely punctured. *Legs* fairly stout; femora broad and somewhat flattened. Length 15 mm., breadth 3.9 mm.

Female: Antennae one-sixth longer than body. Length 15.4 mm., breadth 4 mm.

Paratypes: Length 13-15.8 mm., breadth 3.3-4.2 mm.

Holotype, male (US 62572), Pt. Ritidian, 180 m., northern Guam, in light trap, Aug. 9, 1945, Gressitt; allotype, female (BISHOP 2380), Fadian, Guam, Sept. 18, 1936, from "paipay," Swezey; seven paratopotypes (US, BISHOP, CAS, BM), same data as for holotype. Seven paratypes: Piti, Guam, Sept. 12, 1936, at light, Swezey; Fadian, same data as for allotype; Machanao, June 4, 1936, Swezey; Guam, Jan. 1945, R. Bohart; Pt. Oca, Guam, June 15, 1945, G. Bohart and Gressitt.

DISTRIBUTION: Guam.

This species differs from *C. guttaticolle* (Fairmaire) in being narrower and more tapered posteriorly, in having the pubescence on the pronotum more general at the sides and not forming distinct patches, the inner portion of the pronotal disc more pubescent, more closely punctured or rugose, and the elytra much more closely and more shallowly punctured, with more than ten punctures in a hypothetical row between the suture and the middle of each elytron.

14. Ceresium (Ceresium) guamum rotanum Gressitt, n. subsp. (fig. 5, *c*).

Male: Reddish brown, somewhat shiny; bases of abdominal sternites somewhat pitchy. Body moderately clothed with adpressed golden-buff pubescence; sparsely clothed on frons and vertex, thinly clothed on antenna, sparse on central portion of pronotal disc with a single hair arising from each puncture, and side of pronotum with close pubescence interrupted by a few glabrous spots; scutellum somewhat densely clothed; elytra moderately clothed, with a hair from each puncture; ventral surfaces rather closely clothed, except along median line and middle of sides of abdominal sternites.

Head finely punctured and shallowly concave on vertex. *Antenna* about one-seventh longer than body. *Prothorax* broader than long, fairly even on disc, with punctures fairly small and close. *Elytra* finely and closely punctured, the punctures gradually smaller apically. Length 14 mm., breadth 3.8 mm.

Female: Antenna one-tenth longer than body. Length 16 mm., breadth 4.25 mm.

Holotype, male (BISHOP 2381), Sonson (Songsong), Rota, Aug. 6, 1940, D. Matusita; allotype, female (CM), Rota, Oct. 18, 1945, W. L. Necker; paratype, female (US), same data as for allotype; 10 paratypes (US, BISHOP, BM), Rugi and Sabana, Rota, June 1946, Townes.

DISTRIBUTION: Southern Mariana Is. (Rota).

This species differs from *C. guamum* in being slightly broader and having a shorter antenna, being duller brown on elytra, more uniformly colored on pronotum and paler on femora, having the pronotum more even, with closer and finer punctures and with the pronotal pubescence paler, and less extensive, particularly on basal half of central portion.

15. Ceresium (Ceresium) guttaticolle yapense Gressitt, n. subsp. (fig. 5, *d*).

Ceresium guttaticolle, Gressitt (not of Fairmaire), 1951, Ent. Soc. Am. Ann. **44** (1): 12 (Yap).

Female: Bright reddish brown; somewhat deeper reddish on head, pronotum and ventral surfaces; pale ochraceous on legs. Body irregularly clothed with grayish-white or yellowish pubescence: head with pale yellowish around upper eye-lobe; antenna very thinly clothed, with a few oblique hairs below basally; pronotum with a large dense patch of yellowish near each corner and scattered hairs between; scutellum densely clothed with yellowish white; elytra sparsely clothed with recumbent white hairs; ventral surfaces clothed with thin, whitish pubescence, sparser on parts of abdomen and middle of metasternum; legs sparsely clothed.

Head flattened above, finely grooved between antennal supports. *Antenna* one-seventh longer than body; third segment not quite as long as scape, longer than fourth, and shorter than fifth; fifth to tenth gradually shorter. *Prothorax* distinctly broader than long, disc with a raised median line behind center and remainder somewhat strongly punctured, more sparsely so on each side anterior to middle. *Elytra* somewhat deeply and strongly punctured, the punctures becoming gradually smaller apically. *Ventral surfaces* minutely punctured except near middle of metasternum, where there are larger punctures. Length 13.5 mm., breadth 3.8 mm.

Paratypes: Length 11-12.5 mm., breadth 3.2-3.4 mm.

Holotype, female (US 62573), Dugor, Yap I., Yap, July-Aug. 1950, Goss. Seven paratypes (US, BISHOP, CAS, MCZ): five, Kolonia, Mar. 1-8, 1949, K. L. Maehler; one, Dugor and one, Yap I., without exact locality, Goss.

One (Taiwan Agric. Res. Inst.), Yap I., July 1937, T. Hosokawa. Another specimen (BISHOP), Potangeras I., Ulithi Atoll, Aug. 16, 1945, C. O. Davison.

DISTRIBUTION: Western Caroline Is. (Yap, Ulithi).

This subspecies differs from *C. guttaticolle guttaticolle* (Fairmaire) in being slightly smaller, more slender, and slightly less reddish, with the pronotal

spots and scutellum a little less yellow and the pronotal disc more coarsely and closely punctured and rugose and its pubescence a little more extensive. The abdomen is more sparsely pubescent in the new form. The Ulithi specimen demonstrates slight differences from the Yap series and suggests that further speciation has started since the form reached Ulithi from Yap. This suggests a greater age for this atoll than has been suggested for most atolls in Micronesia, but part of Ulithi is higher, and may be older, than most other atolls. The typical form is found in southern Polynesia and eastern Melanesia. If actually absent from intervening islands, this distribution is puzzling. The typical form has been recorded from *Hibiscus tiliaceus*.

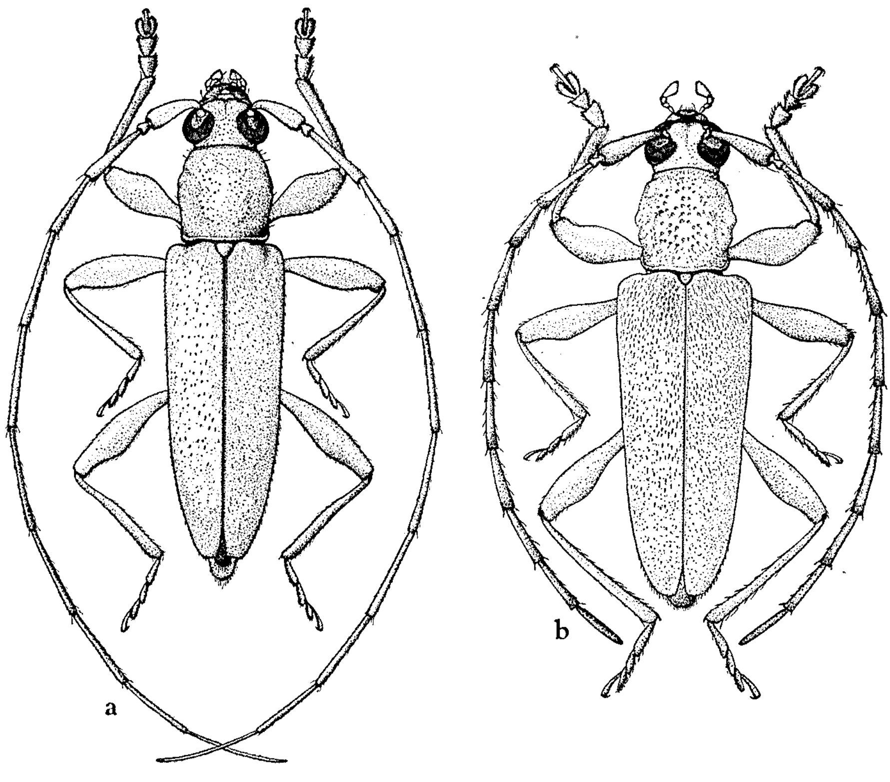


FIGURE 6.—a, *Ceresium (s. str.) clarkei;* b, *Ceresium (s. str.) testaceum.*

16. Ceresium (Ceresium) testaceum Gressitt, n. sp. (fig. 6, *b*).

Male: Testaceous to pale ochraceous; second antennal segment, apices of third and fourth, antennal supports, palpi and tarsal claws darkest: reddish brown. Body thinly and irregularly clothed with pale pubescence: head sparsely clothed except around upper eyelobe; antenna very thinly clothed and with short fringing hairs beneath basally; pronotum nearly glabrous along central portion of disc, with single hairs in the large punctures and with thin close pubescence at sides, interrupted by a few bare nodes of punctures bearing

single hairs; scutellum subdensely clothed; elytra with isolated whitish hairs, which basally are hardly longer than spaces between punctures; ventral surfaces thinly clothed with moderately dense whitish pubescence except along middle of metasternum; legs more sparsely clothed.

Head finely and somewhat densely punctured except on sides of frons and antennal supports, slightly grooved between supports. *Antenna* one-fourth longer than body, somewhat flattened; scape barely longer than third segment; third a little longer than fourth and slightly shorter than fifth; seventh to tenth slightly diminishing in length. *Prothorax* barely as broad as long, somewhat unevenly obtuse at side; pronotal disc with central subglabrous area narrowly hexagonal, coarsely rugose-punctate, with many of the punctures confluent and with a narrow median impunctate line. *Elytra* densely punctured, the punctures deep and closer than interspaces basally. *Ventral surfaces* minutely punctured. *Femora* not very broad. Length 14 mm., breadth 3.7 mm.

Female: Antenna one-sixth longer than body. Length 16 mm., breadth 4.2 mm.

Holotype, male (US 62574), Civ. Ad. Area [Nantaku], Moen [Wena] I., Truk, Feb. 27, 1949, R. W. Potts; allotopotype, female (US), same data except Feb. 1; three paratopotypes (BISHOP, CAS, BM), Feb. 27 to Mar. 25, Potts; three paratypes (US, Honolulu Quarantine coll.), Moen, Feb. 5-9, 1948, K. L. Maehler, Mar. 1949, D. Langford.

DISTRIBUTION: Eastern Caroline Is. (Truk).

This species differs from *C. guttaticolle* (Fairmaire) in being more elongated and much paler in color, with the prothorax longer, less shiny, with less dense and less yellowish-pubescent patches, and with coarser and partly confluent pronotal punctures.

17. Ceresium (Ceresium) robustum Gressitt, n. sp. (fig. 5, *e*).

Female: Dark reddish brown, in part pitchy or paler: head reddish; antenna reddish brown, paler distally; prothorax dark reddish brown, pitchy on borders and near basal angles of pronotum; elytra quite dark reddish brown, somewhat paler apically; ventral surfaces dark reddish brown, largely pitchy on thoracic pleura; legs bright reddish brown. Body in large part sparsely pubescent, with single scattered hairs except narrowly around upper eye-lobe, a suggestion of a patch on side of pronotum near base, the scutellum and thoracic pleura moderately pubescent.

Head broad, finely and irregularly punctured, slightly concave between antennal supports. *Antenna* slightly longer than body, fairly stout; scape gradually thickened, fully as long as second and third segments combined; fourth much shorter than third; fifth longer than third, subequal to following. *Prothorax* distinctly broader than long; pronotal disc grossly punctured, with a short longitudinal raised area just behind center and an oblique depression on each side a little behind former. *Elytra* broad, heavily punctured, the punctures mostly no larger than interspaces; apices subrounded. *Ventral surfaces* sparsely punctured. *Legs* stout; femora somewhat flattened. Length 16 mm., breadth 4.8 mm.

Holotype, female (US 62575), Ine Islet, Arno Atoll, Aug. 8, 1949, at light, Ira La Rivers.

DISTRIBUTION: Marshall Is. (Arno).

This species differs from *C. pubescens* Dillon and Dillon in being a little shorter, with the antenna shorter, the prothorax and elytra much more coarsely and sparsely punctured, and the antenna more finely punctured.

18. Ceresium (Ceresium) casilelium Gressitt, n. sp. (fig. 7, *a*).

Female: Reddish brown, slightly paler on antenna, legs, and abdomen. Body sparsely pubescent above and more densely so beneath: head with a border of pale pubescence around upper eye-lobe; central portion of pronotal disc with a single hair arising from each puncture and sides of disc with fairly close golden to grayish-buff pubescence interrupted by a few smooth glabrous areas; scutellum densely clothed with fine, yellowish-white pubescence; elytra with a single large adpressed yellowish hair arising from each puncture, the hairs much longer than interspaces; ventral surfaces finely and closely pubescent, sparsely so along middle.

Head large, finely and irregularly punctured, slightly concave between antennal supports. *Antenna* as long as body, moderately stout; scape distinctly thickened distally, nearly as long as second and third segments combined; fourth much shorter than third; fifth barely longer than third; following gradually shorter. *Prothorax* distinctly broader than long, somewhat irregularly rounded at side; pronotal disc convex, impressed with strong, in part confluent, punctures and an oblique depression on each side behind middle; sides of pronotum uneven, with some raised areas, some sparse, large, shallow punctures, and some smooth areas. *Elytra* broad, subparallel, rounded apically; each strongly punctured on basal three-fifths, the punctures slightly asperate basally, deeper and in part sparser than those of pronotal disc. *Ventral surfaces* in large part very finely punctured, a few larger punctures near middle of metasternum; mesosternum and metasternum deeply grooved medially. *Legs* fairly stout; femora flattened. Length 14 mm., breadth 4 mm.

Paratypes: Length 12-14.7 mm., breadth 3-4 mm.

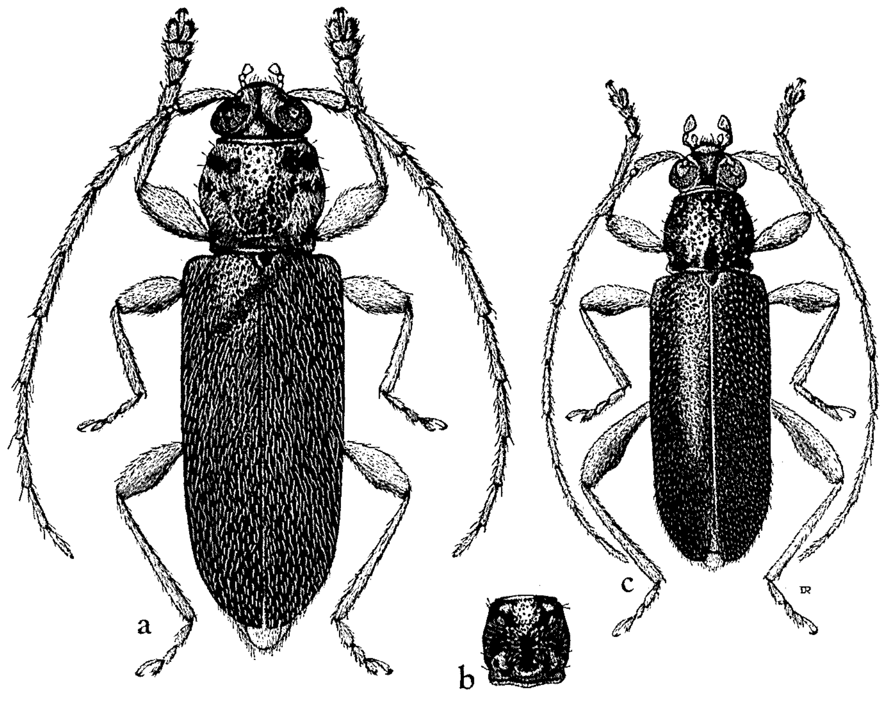


FIGURE 7.—a, *Ceresium* (*s. str.*) *casilelium;* b, *C.* (*s. str.*) *adamsi kusaiana,* dorsal view of prothorax; c, *C.* (*s. str.*) *adamsi adamsi.*

Holotype, female (US 62576), Agric. Exper. Sta., just south of Colonia, Ponape, Jan. 6, 1953, Gressitt. Paratypes: one female (BISHOP), Colonia (Koronia), Ponape, Nov. 27, 1927, Uchiyama; one female (Hokkaido Univ.), Colonia, Ponape, Aug. 21, 1928, Uchiyama.

DISTRIBUTION: Eastern Caroline Is. (Ponape).

This species differs from *C. robustum* in being slightly narrower and paler reddish brown, with the pronotum densely pubescent at the sides and with three fairly large, smooth, glabrous areas on each side anterior to the middle, and in the elytra having smaller punctures.

19. Ceresium (Ceresium) nanyoanum Matsushita.

Ceresium nanyoanum Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2): 117 (Palau; type in Hokkaido Univ.).

Male: Reddish brown; head dark red to pitchy; antenna ochraceous; prothorax reddish; elytra more brownish, paler postbasally; legs and abdomen reddish ochraceous; thoracic sterna darker. Body sparsely clothed with pale pubescence; hairs on elytra only about as long as spaces between punctures; thoracic pleura closely but thinly clothed with pale-gray pubescence; remainder of ventral surfaces with very sparse fine hairs.

Head finely punctured, level between antennal supports. *Antenna* about one-eighth longer than body; third segment shorter than scape and longer than fourth; fifth longer than third. *Prothorax* longer than broad, evenly rounded at each side; pronotal disc evenly convex, with a feebly raised postmedian line and lateral areas, the remainder with regular moderate, shallow punctures. *Elytra* twice as long as head and prothorax combined, narrowed posteriorly, grossly punctured on basal three-fifths. *Ventral surfaces* finely and sparsely punctured. *Femora* briefly pedunculate. Length 9-10.5 mm., breadth 2-2.3 mm.

Female: Antenna barely longer than body. Length 9-10 mm., breadth 2.4 mm.

DISTRIBUTION: Western Caroline Is.

PALAU. BABELTHUAP: Ulimang, Dec. 1947, two taken beating dead banana leaves, Dybas. KOROR: Limestone Ridge, south of inlet, southeast Koror, Jan. 1948, Dybas, Apr. 1949, Langford. ULEBSEHEL (Aurapushekaru): Jan. 1948, beating vegetation, Dybas. PELELIU: July 1945, Dybas; Mt. Amiangal, Dec. 1952, in light trap, Gressitt.

20. Ceresium (Ceresium) adamsi adamsi Gressitt, n. sp. (fig. 7, *c*).

Female: Deep reddish brown, nearly pitchy on borders of prothorax; in part paler: antenna ochraceous, becoming testaceous distally; elytra ochraceous apically; legs ochraceous; abdomen slightly more castaneous; thoracic sterna darker. Body irregularly clothed with buffy pubescence; nearly glabrous on head except around upper eye-lobe; fine on antenna and more dense distally; nearly glabrous on pronotum; finely and sparsely pubescent on side of prothorax; a single hair from each elytra puncture, mostly not much longer than spaces between punctures; close, but of fine hairs, on thoracic sterna, except for middle of metasternum; very sparse on abdomen.

Head sparsely punctured except between antennal supports, moderately grooved medially. *Antenna* one-sixth longer than body, fairly slender; third segment as long as scape, one-fourth longer than fourth; fifth slightly longer than third; following decreasing slightly in length. *Prothorax* barely broader than long, somewhat evenly rounded at side; disc subevenly convex, but very coarsely punctured and with a raised median line and

raised impunctate areas near corners and on side. Scutellum rounded trapeziform. *Elytra* subparallel, narrowed and subrounded apically; each deeply and rather strongly punctured on basal three-fifths, then suddenly very finely punctured. *Ventral surfaces* very finely or very sparsely punctured, but more strongly so on middle of metasternum. *Femora* shiny, moderately swollen; tarsi slender. Length 10.5 mm., breadth 2.85 mm.

Holotype, female (US 62577), Matalanim [Madolenihm] Plantation, Madolenihm District, southeast Ponape, June-Sept. 1950, Adams.

DISTRIBUTION: Eastern Caroline Is. (Ponape).

This species differs from *C. simile* in being less elongate and brighter red, with the prothorax broader and less vermiculate, the third antennal segment shorter, and the elytra more heavily punctured and more suddenly finely punctured behind middle.

21. Ceresium (Ceresium) adamsi kusaiana Gressitt, n. subsp. (fig. 7, *b*).

Male: Bright reddish brown, darker on bases of elytra and paler and more brownish on remainder of elytra; antenna ochraceous with scape more glabrous and shiny; legs and abdomen pale ochraceous; thoracic sterna pitchy red brown. Pronotum with sparse distinct hairs on central portion of disc and with an area of close pubescence near each corner; abdomen thinly pubescent; thoracic sterna more closely so.

Antenna one-fifth longer than body. *Pronotum* with large, in part confluent, punctures; raised median strip broad behind middle. Length 10.8 mm., breadth 2.75 mm.

Female: Antenna one-sixth longer than body. Length 12.3 mm., breadth 3.4 mm.

Holotype, male (US 62578), "Hill 541," 165 m., near Mutunlik, eastern Kusaie, Mar. 27, 1953, J. F. G. Clarke; allotopotype, female (BISHOP 2382), same data except collected Mar. 23. Both were taken in beating vegetation.

DISTRIBUTION: Eastern Caroline Is. (Kusaie).

This subspecies differs from *C. adamsi adamsi* in having conspicuous, sparse hairs on the central portion of the pronotal disc, in having a dense area of pubescence near each corner, and in having the pronotal punctures sparser and in part confluent and with broader interspaces and broader postmedian impunctate strip.

22. Ceresium (Ceresium) simile Gahan.

Ceresium simile Gahan, 1890, Ann. Mag. Nat. Hist. VI, **5**: 169 (Bonin Is.; type in British Mus.).

Male: Reddish brown, darker on some of borders of pronotum and thoracic sternites. Body subregularly clothed with pale hairs; somewhat more densely so around eye and side of pronotum.

Head closely punctured. *Antenna* one-fourth again as long as body; scape about as long as third segment; third longer than fourth, barely as long as fifth. *Prothorax* longer than broad, coarsely rugose-punctate on disc, with an irregular postmedian smooth ridge. *Femora* pedunculate-clavate, shiny.

Female: Antenna barely longer than body. Length 13.5 mm., breadth 3.5 mm.

DISTRIBUTION: Bonin Is.

BONIN IS. A female (Agric. Tokyo) was taken in 1930 by Daido; two (BISHOP, CAS) from Gressitt collection, one taken July 13, 1934.

23. Ceresium (Ceresium) signaticolle Matsumura and Matsushita.

Ceresium signaticolle Matsumura and Matsushita, IN Matsushita, 1932, Ins. Matsumurana **7** (1-2): 69, fig. 3 (Bonins; type in Hokkaido Univ.).

Male: Black; elytra brownish black. Head and prothorax with fine and close yellowish pubescence, with a large triangular black spot on pronotal disc and a black dot on each side near anterior border of pronotum; antenna with close grayish-yellow pubescence; elytra with a yellowish hair arising from each puncture; ventral surfaces finely yellowish pubescent; legs thinly clothed with gray hairs.

Antenna not quite as long as body; scape longer than third segment; fourth shorter than third. *Prothorax* longer than broad, cylindrical; disc with a smooth raised median line and coarse rugose punctures. *Elytra* coarsely and closely punctured on basal half, finely and sparsely punctured posteriorly. Length 15 mm. (After Matsumura and Matsushita.)

DISTRIBUTION: Bonin Is. No island listed; no additional material.

24. Ceresium (Ceresium) yoshinoi Matsushita.

Ceresium yoshinoi Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2): 117 (Palau; type in Hokkaido Univ.).

Male: Reddish brown; thorax and abdomen more reddish; scape and legs ochraceous. Body irregularly clothed with whitish to tawny pubescence; moderately dense and tawny on side of pronotum, with sparse single hairs on disc; dense white pubescence on scutellum; single buffy-white hairs on elytra, each much longer than spaces between punctures; thoracic pleura rather densely clothed and abdomen very sparsely clothed.

Head moderately concave between antennal supports. *Antenna* one-seventh longer than body; scape about as long as second and third segments combined; fifth slightly longer than third. *Prothorax* about as broad as long; pronotal disc with three longitudinal raised lines behind middle, rather closely impressed with punctures of different sizes, particularly behind middle. *Elytra* with fairly deep punctures, subasperate basally and finer apically, mostly separated by more than their diameters.

Female: Antenna one-eighth longer than body.

Length 11.5-15 mm., breadth 2.8-4 mm.

DISTRIBUTION: Western Caroline Is.

PALAU. BABELTHUAP: Ulimang, beating dead banana leaves, Dec. 1947, Dybas. KOROR: Nov. 1947, Limestone Ridge, north of inlet, Jan. 1948, Dybas, Mar. 1949, Maehler, Apr. 1949, Langford; southwest Koror, Aug. 1951, Dec. 1952, light trap, Gressitt, May, July, Aug. 1952-1953, Beardsley. PELELIU: Aug. 1945, Dybas. ANGAUR: Dec. 1951, Gressitt.

25. Ceresium (Ceresium) sublucidum Gressitt, n. sp. (fig. 8, *a*).

Female: Reddish brown, moderately brilliant; femora and antennal scape pale ochraceous; tibiae more reddish; ventral surfaces slightly pitchy, but paler beyond middle of abdomen. Body moderately clothed with pale pubescence, the hairs fine and short: not

very dense on head, very thin and sparse on most of pronotal disc, closer, but also thin, on side of pronotum, quite short on most of elytral disc, moderately dense on side of metasternum, but much sparser on abdomen.

Head finely punctured, narrowly grooved between antennal insertions. *Antenna* barely longer than body, slender but slightly flattened; scape barely longer than third segment; fourth much shorter; fifth longer than third; sixth to last decreasing slightly in length. *Prothorax* barely broader than long, subevenly rounded at side; pronotal disc moderately even, with deep punctures on each side of median line, which is glabrous and broadens behind center; smooth line at each side in basal portion slightly oblique, not very distinct; interpunctural spaces finely punctulate. *Elytra* deeply and closely punctured on basal two-thirds. *Femora* distinctly flattened. Length 10.5 mm., breadth 2.55 mm.

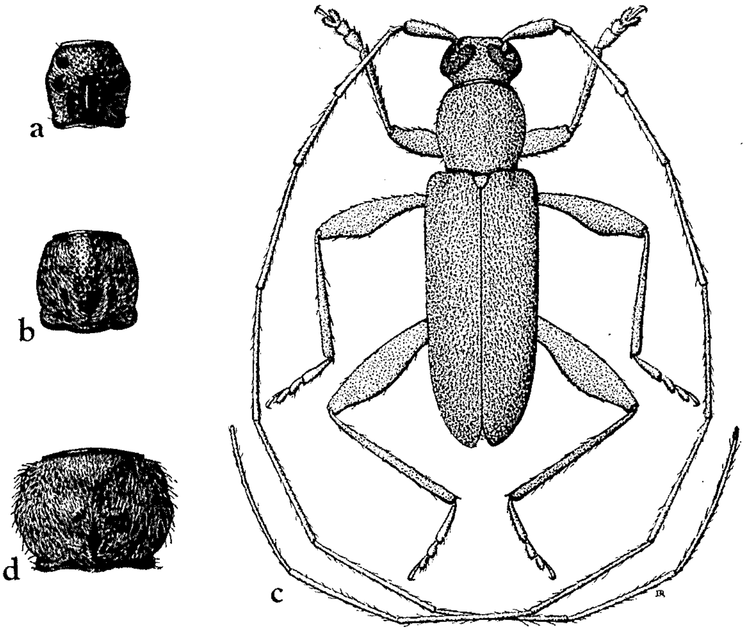


FIGURE 8.—**a**, *Ceresium* (*s. str.*) *sublucidum*, dorsal view of prothorax; **b**, *C.* (*s. str.*) *unicolor marshallum*, dorsal view of prothorax; **c**, *Examnes ponapensis*; **d**, *Gelonaetha hirta*, dorsal view of prothorax.

Holotype, female (US 62579), Pt. Oca, 20 m., Guam, June 6, 1945, light trap, G. Bohart and Gressitt; paratype, female (BISHOP), Pt. Taguan, Guam, July 10, 1945, G. Bohart and Gressitt.

Three additional specimens are not designated paratypes, though they probably belong here: A male, Piti, Guam, May 7, 1936, Swezey; a female, As Mahetog area, Saipan, Apr. 23, 1945, at light, Dybas. The third, a female from Saipan, June 29, 1951, R. M. Bohart, might possibly be a hybrid between this species and *C. unicolor*. It is 15 mm. long, and fairly broad, though the preceding two are of the same proportions as the type.

DISTRIBUTION: Southern Mariana Is. (Guam and Saipan).

This species differs from *C. unicolor* (Fabr.) in being smaller, paler, and more brilliant, with hairs on the dorsum much finer and shorter, thus appearing much sparser. The pronotum is more evenly convex, there are fewer punctures on the disc, and the abdomen is much more sparsely pubescent than in *C. unicolor*.

26. Ceresium (Ceresium) unicolor unicolor (Fabr.).

Saperda unicolor Fabr., 1787, Mant. Ins. **1**: 147 (Amsterdam I.; type in Banks coll., British Mus.).

Ceresium unicolor, Bates, 1874, Ann. Mag. Nat. Hist. IV, **14**: 131.—Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2): 116 (Palau).—Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 148 (Palau).—Gressitt, 1951, Ent. Soc. Am., Ann. **44**: 12 (Guam, Saipan).—Dillon and Dillon, 1952, B. P. Bishop Mus., Bull. **206**: 18.

Ceresium palauense Matsushita, 1932, Ins. Matsumurana **6** (4): 169, fig. 1 (Palau; type in Hokkaido Univ.).—Ohbayashi, 1941, Tenthredo **3** (3): 223 (Saipan); new syn.

Male: Dull reddish brown, paler on posterior portions of elytra and on femora. Body somewhat densely clothed with moderately adpressed pale-buff hairs, closer and finer on pronotum than on elytra, but with some raised glabrous areas on pronotum.

Head in part closely and finely punctured. *Antenna* one-fifth longer than body; scape barely longer than third segment; third and fifth each much longer than fourth. *Prothorax* barely longer than broad, feebly convex at side; disc slightly uneven, with three parallel longitudinal smooth low ridges on basal half, two or three slightly raised areas on anterior portion of side, and moderately strong punctures between. *Elytra* heavily punctured on basal three-fifths.

Female: Antenna about as long as body.

Length 10-17 mm., breadth 2.7-4.5 mm.

DISTRIBUTION: Solomons, New Hebrides, Fiji, Tonga, Samoa, Marquesas, Henderson I., Hawaiian Is., Micronesia.

BONIN IS. CHICHI JIMA: June 1949, Kondo.

N. MARIANA IS. PAGAN: Sept. 1949, Kondo.

S. MARIANA IS. SAIPAN: Sept. 1941, Matusita; many, As Mahetog area, hills east of Garapan and Tanapag, Mt. Tagpochau, and other localities, Jan. to Oct. 1945, Dybas; Mt. Topotchau, Oct. 1947, Lange, Feb. 1949, Maehler; Susupe, Jan. 1948, Tanapag, Jan. 1949, Maehler, Aug. 1951, R. M. Bohart. TINIAN: Mt. Lasso, June 1946, Townes, Hadden; Marpo Valley, June 1946, Oakley, June 1952, Kondo, Nov. 1952, Beardsley. AGIGUAN: May 1952, Peterson and Kondo, July 1954, Davis. ROTA: Oct. 1945, Dybas, June 1946, Townes, June 1952, Kondo. GUAM: 1911, Fullaway, 1923, Hornbostel; Piti, Alifan, Barrigada, Merizo, Sumay, 1936, Swezey and Usinger; Piti, 1938, Oakley; many, Pt. Oca and other localities, Apr.-June 1945, G. Bohart

and Gressitt, Nov.-Dec., Gressitt; Piti and Pati Pt., June 1945, Dybas; Mt. Alifan, Apr. 1946, Krauss.

PALAU. KOROR: Feb., June, 1953, Beardsley. PELELIU: Aug. 1945, Dybas.

TRUK. WENA (Moen): Civ. Ad. Area (Nantaku), Feb.-Apr. 1949, Potts.

PONAPE. Colonia (BISHOP, Hokkaido Univ.), Jan.-Mar. 1929, Uchiyama; Ponape, Mar. 1936; Colonia, Mar. 1948, Dybas.

KUSAIE. Lele, Aug. 1946, Oakley; Mutunlik, 22 m., Apr. 1953, Clarke. Also a doubtful specimen from latter locality, probably with pronotal pubescence rubbed.

GILBERT IS. TARAWA: July-Aug. 1951, Catala. ABEMAMA (Apemama): May 1944, Enke.

HOSTS: *Artocarpus* (after Fairmaire), *Sapindus, Cordia,* and *Casuarina* (after Blair). In dead branches.

27. Ceresium (Ceresium) unicolor marshallum Gressitt, n. subsp. (fig. 8, *b*).

Female: Reddish brown, paler on antenna, particularly on scape; somewhat pitchy on metasternum; ochraceous on legs. Body clothed with whitish-buff pubescence, more whitish on elytra, dense on occiput, side and base of pronotum, and metasternum, sparser on abdomen, and still sparser on elytra and median portion of pronotum.

Head concave and narrowly grooved between antennal supports. *Antenna* about as long as body; first, third, and fifth segments subequal in length. *Prothorax* about as broad as long, narrowed anteriorly; pronotal disc subcoarsely rugose-punctate, with glabrous nodes at side. *Elytra* deeply punctured. Abdomen with pubescence of moderate density. Length 12 mm., breadth 3.3 mm.

Holotype, female (US 62580), Majuro Islet, Majuro Atoll, Marshall Is., June 27, 1950, Ira La Rivers.

DISTRIBUTION: Marshall Is.

This species differs from *C. unicolor* in having the vertex more deeply punctured, in the fifth antennal segment being no longer than the third, in the pronotal disc being distinctly rugose and not merely strongly punctured, and in the abdominal pubescence being less dense than that of the metathorax. The pronotal pubescence is also less dense than is usual with the typical form.

It is a bit puzzling that *C. unicolor* should be represented in the Marshall Islands by an endemic subspecies, when the typical form ranges so widely and occurs on most of the high island groups of Micronesia. However, it may be a more recent introduction, or a frequent reintroduction, to the high islands. But again, the presence of endemic forms in the Marshalls seems to contradict the theory of very recent origin of the atolls. The Gilbert Island specimens of *C. unicolor* suggest a tendency toward subspeciation.

Genus **Examnes** Pascoe

Examnes Pascoe, 1869, Ent. Soc. London, Trans. III, **3** : 539 (type: *E. longicornis* Pascoe; East Indies).

Antenna twice as long as body in male; third segment much longer than scape; prothorax longer than broad, feebly swollen at side; hind femur extending beyond elytral apex.

This genus is centered in eastern Indonesia and is found also in the Philippines, New Guinea, and Christmas Island (Indian Ocean). The following is somewhat questionably a member of this genus.

28. Examnes ponapensis Gressitt, n. sp. (fig. 8, *c*).

Male: Reddish brown, slightly pitchy on thoracic sterna and pale ochraceous on antenna and legs. Body clothed with sparse, subrecumbent, pale hairs, which are thicker on thoracic sterna.

Head as broad as prothorax, subdeclivitous anteriorly, somewhat strongly and subdensely punctured. *Antenna* slender, two and one-third times as long as body; scape not quite as long as third segment; fourth shorter than third; fifth much longer than third; fifth and following subequal. *Prothorax* longer than broad, widest at middle; disc distinctly but not very closely punctured, with a slightly raised postmedian line and transverse area on each side of center. *Elytra* somewhat deeply and subregularly punctured, rounded apically. *Legs* slender; femora somewhat flattened; hind tarsus with first segment about five times as long as broad. Length 10.4 mm., breadth 2.75 mm.

Paratypes: Length 9.5-10.3 mm., breadth 2.2-2.4 mm.

Female: Antenna one-half again as long as body. Length 8.5 mm., breadth 2 mm.

Holotype, male (US 62581), Colonia, Ponape, Feb. 29, 1948, H. S. Dybas; allotype, female (BISHOP 2383), Peipalap Pk., 200 m., Ponape, June-Sept. 1950, P. A. Adams; two paratopotypes, males (CM, BISHOP), Colonia, Mar 9, 1948, Dybas.

DISTRIBUTION: Eastern Caroline Is. (Ponape).

This species differs from *E. philippensis* (Newman) in having the antenna longer and less flattened, the scape less swollen, and the second antennal segment shorter. It may not be a true member of this genus; but it is related to *E. longipes* Gressitt of New Guinea, from which it differs in its longer antenna, narrower prothorax—the disc of which lacks raised transverse lines—, and longer elytra and shorter hind femora.

Genus **Gelonaetha** J. Thomson

Gelonaetha Thomson, 1878, Rev. Mag. Zool. III, **6**: 12 (type: *Stromatium hirtum* Fairmaire).

Astrimus Sharp, 1878, Ent. Soc. London, Trans. **1878** : 204 (type: *A. obscurus* Sharp).

Body broad and flattened, parallel-sided, hairy. Prothorax rounded at sides; flattened on disc.

This genus contains a single species of wide distribution.

29. Gelonaetha hirta (Fairmaire). (Figure 8, *d.*)

Stromatium hirtum Fairmaire, 1850, Rev. Mag. Zool. II, **2**: 60 (Tahiti; type in Paris?).

Gelonaetha curtipes Thomson, 1878, Rev. Mag. Zool. III, **6**: 13.

Astrimus obscurus Sharp, 1878, Ent. Soc. London, Trans. **1878**: 204 (Hawaiian Is.).

Astrimus hirtus, Sharp, 1900, Fauna Hawaiiensis 2(3): 96.

Gelonaetha hirta, Gahan, 1906, Fauna of India, Col. Ceramb., 155, fig. 62. —Swezey, 1942, B. P. Bishop Mus., Bull. **172**: 170 (Guam).

Male: Dark reddish brown. Body almost entirely hairy, the hairs longest on inner side of antenna and anterior portion of side of prothorax. *Antenna* nearly one-half again as long as body; third segment much longer than any other; fourth fully as long as scape. *Pronotum* somewhat asperately punctured. *Elytra* closely and rather irregularly punctured, each with two or three more or less distinct raised lines.

Female: Antenna not quite as long as body.

Length 9.5-17 mm., breadth 3-5 mm.

DISTRIBUTION: India, Thailand, Philippines, Taiwan, Mariana Is., Hawaiian Is., Tahiti.

S. MARIANA IS. SAIPAN: Four, Papago area, and Mt. Tagpochau, northeast of summit, Jan. 1945, Dybas. GUAM: Eighteen, Pt. Oca and Pilgo River, May-June 1945, G. Bohart and Gressitt, mostly in light trap, and one, Apr. 1945, J. Conover.

HOSTS: Probably dead wood of various kinds.

TRIBE OBRIINI

Genus **Longipalpus** Montrouzier

Longipalpus Montrouzier, 1861, Soc. Ent. France, Ann. IV, **1**: 275 (type: *L. palazyanus* Montrouzier; Lifu).—Lacordaire, 1869, Gen. Col. **8**: 363.

Iphrobrium Gressitt, 1935, Ins. Matsumurana **9** (4): 150 (type: *I. dilatipenne* Gressitt; Ryukyu Is.); 1951, Ent. Soc. Am., Ann. **44** (1): 22; new syn.

Nerida McKeown, 1940, Australian Mus., Rec. **20**(5): 293 (type: *N. carabiformis* McKeown).—Dillon and Dillon, 1952, B. P. Bishop Mus., Bull. **206**: 30.

Slender, flattened; maxillary palpi with last segment very long and broadest at apex; eye large, emarginate; antenna slender with third segment longer than fourth and much shorter than fifth; prothorax long, narrower at base than at apex, broadest just distal to middle; elytra slightly broadened behind middle; femora pedunculate-clavate.

Two species of this genus, *L. gynandropsidis* Fairmaire and *L. oblongoguttulatum* Fairmaire, have long been well known and associated with the genus *Obrium*. In 1951 I associated the former, as well as the type of *Nerida* and others, with *Iphrobrium*. In 1952 the Dillons associated them with *Nerida*. In 1934 Blair (B. P. Bishop Mus., Bull. **114**: 275) mentioned that *Longipalpus*

palazyanus Montrouzier was the same as *Obrium gynandropsidis,* but he did not use *Longipalpus. Longipalpus* does not have the conspicuous groove on the side of the metasternum characteristic of *Obrium.* Lacordaire misplaced *Longipalpus* tribally, as did McKeown with *Nerida.* McKeown's *N. intricata* is extremely close to, if not identical with, *O. gynandropsidis. Idobrium seychellarum* Aurivillius belongs to *Longipalpus* and so, probably, does *Obrium nitidicolle* Aurivillius (Seychelles). Some species of *Anisogaster* appear very closely related to *Longipalpus.* The genus is thus found from the Pacific to the Seychelles, though it may not be represented in continental Asia.

Key to Micronesian Species of Longipalpus

1. Pronotum and occiput very finely punctured or nearly impunctate; prothorax much less than twice as long as broad 2
 Pronotum and occiput densely granulose or granulose-punctate; prothorax nearly twice as long as broad; length less than 6 mm.; each elytron with generally six or more pale areas .... **palauensis**

2(1). Pronotal disc with minute punctures giving a slightly dull appearance; side of disc with distinct pale pubescence; length often more than 6 mm. 3
 Pronotal disc with a few scattered small punctures, and with some barely detectable micropunctulation; prothorax somewhat strongly rounded in central portion; each elytron with a premedian and a postmedian pale area adjacent to suture; length less than 6 mm.; Palau, Yap .... **sinuaticollis**

3(2). Prothorax distinctly constricted near apex; disc wtih three feeble swellings behind constriction; each elytron with about 21 punctures in first complete row paralleling suture .... **guamensis**
 Prothorax feebly constricted near apex; disc evenly convex behind constriction; each elytron with about 30 punctures in first complete row paralleling suture .... **saipanensis**

30. Longipalpus palauensis (Gressitt), n. comb.

Iphrobrium palauense Gressitt, 1951, Ent. Soc. Am., Ann. **44** (1): 21 (Palau; type in Calif. Acad. Sci.)

Male: Pale; dorsum partly pitchy and partly pale testaceous: head slightly darkened on occiput; pronotum with broad lateral pitchy stripes which merge near apex and base; each elytron largely pitchy, marked with testaceous on extreme base, lateral margin on anterior three-fifths and distal fifth, and disc with four or five pale spots of varying size and shape, one being in common, behind middle.

Head and pronotum finely granulose to rugulose or punctate. *Antenna* with fourth segment much shorter than third. Each *elytron* subregularly punctured on basal half. *Hind femur* with a sinuous row of bristles, primarily along upper edge.

Female: Second and following abdominal segments abbreviated; hind femur without bristles.

Length 4.5-6 mm.

DISTRIBUTION: Western Caroline Is.

PALAU IS. Babelthuap: Wooded peak southwest of Ulimang, Dec. 1947, Dybas. Koror: Northeast Limestone Ridge, Dec. 1952, Gressitt, Aug. 1953 and Mar. 1954, Beardsley. Ulebsehel (Aurapushekaru): Jan. 1948,

Dybas. NGARMALK ("NW. Auluptagel") : 25 m., Dec. 1952, Gressitt. NGERGOI (Garakayo) : Aug. 1945, Dybas. PELELIU : Aug. 1945, Dybas.

HOSTS : Native trees.

31. Longipalpus guamensis (Gressitt), n. comb. (fig. 9, *a*).

Iphrobrium guamense Gressitt, 1942, B. P. Bishop Mus., Bull. **172** : 61 (Guam ; type in Bishop Mus.).

Male: Pale testaceous, in part darker : pronotum striped with dark brown on each side of disc ; elytra brown with long pale areas before and behind middle, nearer suture, and near middle and at apex externally.

Head very minutely punctured, finely grooved along middle of vertex. *Antenna* longer than body; fifth segment about as long as third and fourth combined. *Prothorax* long, constricted slightly closer to base than to apex ; feebly rounded in central portion ; disc fairly even, micropunctulate, pubescent at sides. *Elytra* slightly constricted in middle, very slightly broader behind middle than anteriorly ; disc subregularly punctured on basal half ; apex narrowed to sutural angle, which is rounded-acute.

Female: Differs only in the sexual characters of the genus, with abbreviated postbasal abdominal segments.

Length 5-7 mm., breadth 1.2-1.7 mm.

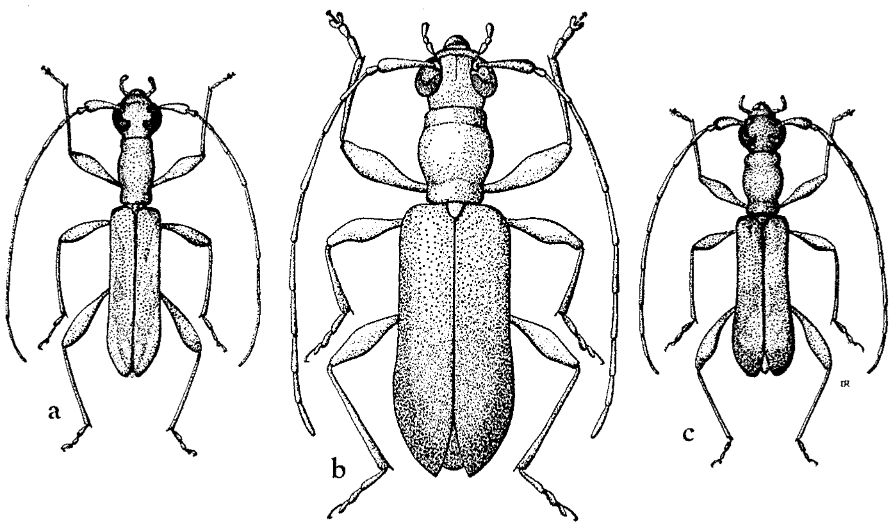


FIGURE 9.—**a**, *Longipalpus guamensis;* **b**, *L. saipanensis;* **c**, *L. sinuaticollis.*

DISTRIBUTION : Micronesia.

S. MARIANA IS. ROTA : Rota, June 1946, Townes. GUAM : Type from Machanao, Usinger ; Pt. Ritidian, June 1945, G. Bohart and Gressitt ; northern Guam, Dec. 1945, R. Bohart.

CAROLINE ATOLLS. NUKUORO : Nukuoro I., Aug. 1946, Oakley.

TRUK. Ton (Tol): Mt. Unibot, Jan. 1953, Gressitt.

MARSHALL IS. Ailuk: Islet north of Baojen I., Dec. 1951, Fosberg.

HOSTS: Probably *Scaevola* and other native plants.

32. **Longipalpus saipanensis** Gressitt, n. sp. (fig. 9, *b*).

Female: Ochraceous, in part marked with pitchy or testaceous: head somewhat reddish, darker between upper eye-lobes; antenna testaceous, slightly duller at ends of segments; prothorax dull ochraceous, in part transparent, with a pitchy stripe from apex to base on each side of disc; elytra dull, each pitchy brown on humerus and along much of outer side and along basal portion and inner part of central portion of disc, testaceous between these two areas and near suture at middle and somewhat behind middle and narrowly on outer apical margin; ventral surfaces somewhat reddish on metasternum; legs testaceous with clubs reddish. Body almost entirely clothed with fine pale pubescence, densest on side of entire thorax.

Head broader than prothorax, finely punctured except just behind eyes, most densely punctulate between upper eye-lobes, finely grooved on vertex and frons. *Antenna* barely longer than body, with distinct setae on inner sides of first six segments; scape slightly longer than second and third segments combined; fifth nearly as long as third and fourth combined; sixth to ninth decreasing in length; last two much shorter, each about as long as fourth. *Prothorax* large, narrower, and constricted for a slightly greater length basally than apically, evenly and gradually swollen in central portion, widest at middle; disc even, feebly convex, micropunctulate. Scutellum narrow, rounded apically. *Elytra* one-half again as long as head and prothorax combined, slightly constricted just anterior to middle, barely broader posteriorly than anteriorly; apex narrowed externally, rounded acute at sutural angle; disc distinctly punctured on basal three-fifths, somewhat irregularly so except for three subregular rows, one near suture, one commencing just inward from humerus and the third commencing on humerus, and with two partly regular rows alternating with the above three. *Ventral surfaces* very minutely punctured. First abdominal segment longer than remainder combined; second segment deeply emarginate and broadly fringed. *Legs* slender with broadly clavate femora. Length 7.5 mm., breadth 1.75 mm.

Male: Antenna slightly longer than body. Length 6.2 mm., breadth 1.6 mm.

Holotype, female (CM), Tuturam, Laulau Bay, Saipan I., S. Mariana Is., Jan. 21, 1945, beating native vegetation, H. S. Dybas; allotype, male (BISHOP), Laulau Bay, Jan. 5, 1945, Dybas; paratype, male (CM), Talofofo Ridge, Saipan, Jan. 23, 1945, Dybas.

DISTRIBUTION: Southern Mariana Is. (Saipan).

This species differs from *L. guamensis* in being darker, in having the prothorax larger, less constricted preapically and more evenly convex, and in the elytra having less regular, and more numerous, punctures. Possibly this form should be ranked as a subspecies, and possibly several of the populations represented by the various island records for *L. guamensis* should have subspecific standing.

33. **Longipalpus sinuaticollis** Gressitt, n. sp. (fig. 9, *c*).

Male: Testaceous to pale pitchy; head pale ochraceous, with palpi paler, antenna testaceous; prothorax testaceous with a brown stripe along each side of disc; elytra pale brown with a large common testaceous spot before middle and another behind middle; ventral surfaces and legs testaceous, slightly duller on metasternum and abdomen. Body glabrous on occiput and pronotum, finely pale pubescent on remainder.

Head minutely punctured, grooved along middle. *Antenna* slightly longer than body; fifth segment slightly longer than scape, barely longer than third and fourth segments combined; sixth and following decreasing in length. *Prothorax* one-half again as long as broad, narrower than head, constricted a little closer to apex than to base, subevenly rounded at side; disc finely and sparsely punctured, with a feeble swelling just anterior to center. Scutellum narrow, rounded apically. *Elytra* nearly one-half again as long as head and prothorax combined, feebly constricted just anterior to middle, barely broader behind middle than basally; disc distinctly and subregularly punctured in basal three-fifths, with a few minute punctures beyond; apex narrowed toward suture, and obtusely rounded a short distance from suture. *Ventral surfaces* micropunctulate and distinctly pubescent; abdomen slender, tapering, with six segments, the first three decreasing geometrically in length. Length 5.2 mm., breadth 1.2 mm.

Female: Slightly darker, but with abdomen pale testaceous. First abdominal segment as long as remaining segments combined; second segment broadly fringed. Length 5.9 mm., breadth 1.3 mm.

Paratypes: Length 4.9-5.75 mm., breadth 1-1.25 mm.

Holotype, male (US 62582), Ulebsehel (Aurapushekaru) I., central Palau Is., Jan. 13, 1948, Dybas; allotype, female (CM), Peleliu I., east coast, Palau, Aug. 2, 1945, Dybas. Paratypes (BISHOP, CM, BM): Ngergoi (Garakayo) I., southern Palau, Aug. 7, 1945, Dybas; east Koror, central Palau, May 30, 1953, Beardsley.

A female from Yap (Kanif, Yap I., July-Aug. 1950, Goss) and a female from Ulithi (Potangeras I., Aug. 16, 1945, R. H. Baker), are tentatively referred to this species.

DISTRIBUTION: Western Caroline Is.

This species differs from *L. palauensis* in having the occiput and pronotum finely and sparsely punctured instead of densely granulose, in having the prothorax much less than twice as long as broad, more swollen in middle, and the elytra with fewer pale spots.

Tribe MOLORCHINI

Key to Micronesian Genera of Molorchini

1. Elytra entire, covering abdomen; hind femur not reaching apex of abdomen, its club not subglobose; eye coarsely facetted........ **Ogasawara**
   Elytra abbreviated and strongly narrowed, exposing much of abdomen; hind femur considerably exceeding apex of abdomen, its club subglobose; eye finely facetted .... **Merionoeda**

Genus **Ogasawara** Gressitt

Ogasawara Gressitt, 1937, Kontyû **11** (4): 320 (type: *O. testacea* Gressitt; Bonins).

Head short, a deep transverse groove on frons; antennal insertions less widely separated than the coarsely facetted eyes; antenna slightly longer than body, first five segments thickened; prothorax nearly as long as broad, with a low tubercle at middle of each side;

elytra long, conjointly rounded apically; first abdominal segment as long as remainder combined, the latter modified.

In addition to the following species, I have a closely related species from Indonesia.

34. **Ogasawara testacea** Gressitt (fig. 10, *a*).

Ogasawara testacea Gressitt, 1937, Kontyû **11** (4): 321, fig. 2 (Bonins; type in Calif. Acad. Sci.).

Female: Pale testaceous, slightly more reddish on head, prothorax, first five antennal segments, and femoral clubs. Body largely subglabrous, with extremely minute hairs, and a few longer ones, particularly on antenna.

Head finely granulose, a fine line along middle of vertex. *Antenna* with first and third segments subequal in length, longer than fourth and shorter than fifth and following. *Prothorax* finely granulose, depressed anterior to center, and with three low swellings on basal half. *Elytra* finely and irregularly punctured throughout. *Femora* pedunculate, with small compressed clubs. Length 11 mm., breadth 2.5 mm.

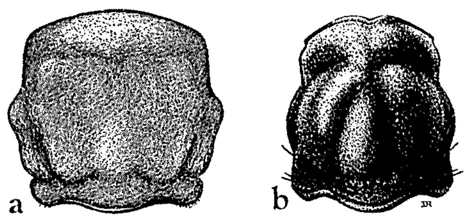


FIGURE 10.—a, *Ogasawara testacea;* b, *Merionoeda (Ocytasia) tosawai.*

DISTRIBUTION: Bonin Is.

BONIN IS. CHICHI JIMA: Type from Kiyose, 1933. No additional material.

Genus **Merionoeda** Pascoe

Merionoeda Pascoe, 1858, Ent. Soc. London, Trans. II, **4**: 238 (type: *M. puella* Pascoe; Celebes).

Ocytasia Pascoe, 1869, Ent. Soc. London, Trans. III, **3**: 575 (type: *O. fulvipennis* Pascoe; East Indies).

Hakata Mitono and Nishimura, 1936, Mushi **9**: 33 (type: *H. hirsuta* Mitono and Nishimura; Japan).

Head with three impressed lines meeting on frons; eyes finely facetted, closer than antennal insertions. Antenna broadened distally. Prothorax constricted near apex and base, with swellings on disc. Elytra abbreviated, narrowed apically. Hind femur reaching beyond apex of body, slender and suddenly clavate.

In the subgenus *Ocytasia,* the middle tarsus of the male has the segments broadly expanded externally. The genus is primarily Oriental, with some African and Neotropical species.

35. Merionoeda (Ocytasia) tosawai Kobayashi (fig. 10, *b*).

Merionoeda tosawai Kobayashi, 1932, Mushi **5**: 1, fig. (Chichi Jima; type in Tosawa coll.).

Male: Black; abdomen reddish ochraceous; femoral petioles testaceous; tarsi partly pale; dorsum with a slight metallic tinge, slightly pitchy on inner half of each elytron; antenna pitchy.

Head sparsely punctured along middle. *Antenna* nearly as long as body; scape longer than other segments; third to last subequal in length, gradually broadened and flattened. *Prothorax* shiny, with three large impunctate swellings separated by punctured grooves. *Elytra* more strongly narrowed in apical half, acute apically, sparsely punctured. Middle tarsus with first two segments much broader than long, tapered and curved upward at outer angles; apex of middle tibia similarly developed. Length 5.5 mm., breadth 1.05 mm.

Female: Elytra bluish black to partly pitchy. Antenna four-fifths as long as body. Length 6.5-8 mm., breadth 1.6-1.9 mm.

DISTRIBUTION: Bonin Is.

BONIN IS. CHICHI JIMA: Three (US, BISHOP), Omura, July 1949, Mead.

TRIBE CLYTINI

KEY TO MICRONESIAN GENERA OF CLYTINI

1. Frons without lateral carinae and frons and vertex without median carinae; antenna slender, often more than one-half as long as body........ 2
   Frons with strong lateral carinae and frons and vertex generally with one or more median carinae; antenna short and stout........**Xylotrechus**
2. Antenna with third and fourth segments unspined, generally each shorter than scape; hind femur reaching to about apex of elytron........**Chlorophorus**
   Antenna with third and fourth or third to fifth segments spined endoapically each generally longer than scape; hind femur generally extending beyond apex of elytra........**Demonax**

Genus **Xylotrechus** Chevrolat

Xylotrechus Chevrolat, 1860, Soc. Ent. France, Ann. III, **8**: 465 (type: *X. sartorii* Chevrolat; Europe).

Amauresthes Chevrolat, 1863, Soc. Sci. Liege, Mem. **18**: 327 (part).

Xyloclytus Reitter, 1912, Fauna Germanica **4**: 46 (type: *Clytus chinensis* Chevrolat).

KEY TO MICRONESIAN SPECIES OF XYLOTRECHUS

1. Pronotum with 10 spots of dense white pubescence; elytra pale chestnut brown with three very narrow zigzag white bands........**grayii**
   Pronotum without white spots, largely clothed with thin greenish pubescence; elytra pitchy with a large basal common triangular ochraceous area, connecting at suture with two successive incomplete subtransverse bands of the same color........**ogasawarensis**

36. Xylotrechus grayii (White). (Figure 11, *a*.)

Clytus Grayii White, 1855, Cat. Col. Brit. Mus. **8**: 261, pl. 6, fig. 4 (North China; type in British Mus.).

Xylotrechus grayii, Chevrolat, 1863, Soc. Sci. Liege, Mem. **18**: 325.—Schwarzer, 1925, Ent. Blätter **21** (1): 26 (Formosa).—Matsushita, 1933, Hokkaido Imp. Univ., Jour. Fac. Agric. **34** (2): 269.—Gressitt, 1951, Longicornia **2**: 243, pl. 9, fig. 8.

Body black; elytra castaneous with base and apex blackish; legs ochraceous with apices of segments blackish. Surfaces with whitish pubescence forming 10 spots on pronotum and three very narrow zigzag bands on elytra, besides covering apex of scutellum and forming several spots or larger areas on side of body from prothorax to last abdominal segment.

Head with a strong carina on each lateral border of frons, a median carina on frons and vertex and a lesser one on each side of median carina. *Antenna* stout, barely exceeding base of elytra. *Pronotum* granulose. *Elytra* finely punctured, each subtransversely truncate apically.

Length 9.5-13.5 mm., breadth 2.2-3.4 mm.

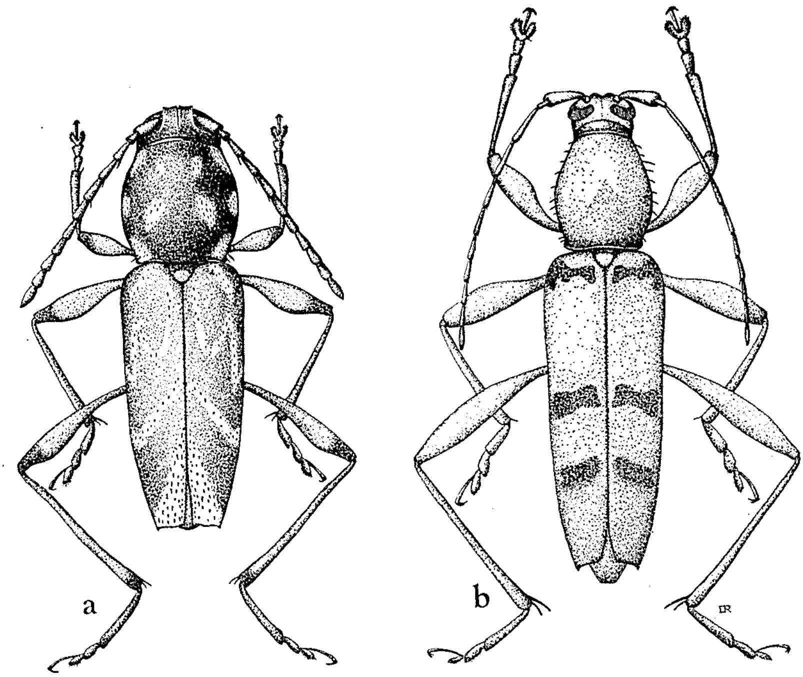


FIGURE 11.—**a**, *Xylotrechus grayii*; **b**, *Chlorophorus muscosus*.

DISTRIBUTION: China, Taiwan, Japan, Marianas.

S. MARIANA IS. TINIAN: Mt. Lasso, northwest slope, Apr. 1945, Dybas; south end, June 1946, Townes. AGIGUAN: Several, May-June 1952,

Kondo, Owen, and Peterson and July 1954, Davis. This species may have been introduced from Japan to Tinian during World War II, thence to Agiguan.

HOSTS: *Tectona grandis, Coffea arabica,* and *Paulownia tomentosa.*

37. Xylotrechus ogasawarensis Matsushita.

Xylotrechus ogasawarensis Matsushita, 1931, Sapporo Nat. Hist. Soc., Trans. **12**: 43 (Bonins; type in Hokkaido Univ.).

Female: Black to pitchy, in part paler: antenna pitchy brown, paler distally; elytra with three pale ochraceous bands, fused along suture, first large, triangular, covering most of extreme bases, second just anterior to middle, incomplete and curved forward and tapering, and third narrow, almost reaching external margin and slightly oblique, apex slightly pale on inner half; femora ochraceous. Body in large part thinly clothed with pale pubescence.

Head with a narrow V-shaped carina on frons and a very narrow inverted Y-shaped carina on occiput. *Antenna* not quite one-half as long as body. *Prothorax* broadest behind middle, with rounded side; disc asperate. *Elytra* finely and closely punctured, subobliquely truncate apically. Length 11.5-13 mm., breadth 2.8-2.9 mm.

DISTRIBUTION: Bonin Is.

BONIN IS. CHICHI JIMA: Omura, July 1949, Mead, July 1951, R. Bohart (US, BISHOP).

Genus **Chlorophorus** Chevrolat

Chlorophorus Chevrolat, 1863, Soc. Sci. Liege, Mem. **18**: 290 (type: *Clytus annularis* Fabr.; Asia).

Anthoboscus Mulsant, 1863, Col. France Long., ed. 2, 166 (type: *Clytus trifasciatus* Fabr.).

Clytanthus Thomson, 1864, Syst. Ceramb., 190 (type: *Anthoboscus tricolor* Chevrolat).

Caloclytus Gahan, 1906, Fauna of India, Col. Ceramb., 260 (type: *Clytus speciosus* Schneider).

Cylindrical; antennae somewhat closely inserted, unspined; prothorax subglobose; elytra long, truncate apically; legs slender, but hind femur not extending beyond elytral apex and first hind tarsal segment shorter than remainder combined.

This genus is widely distributed in Asia and neighboring areas, but it is poorly represented on oceanic islands.

Key to Micronesian Species of Chlorophorus

1. Dorsum somewhat sulphurous or orange yellow above, with black markings, including a lunule on base of each elytron........ 2

   Dorsum olive green with three narrow transverse black bands on elytra; at base, middle, and beginning of last quarter........ **muscosus**

2. Pronotum with a large black inverted Y on disc; median elytral black band extending forward along suture..**annularis**
   Pronotum with four small round black spots in a transverse row; median elytral black band not extending forward along suture..............................**boninensis**

38. **Chlorophorus annularis** (Fabr.).

Callidium annulare Fabr., 1787, Mant. Ins. **1**: 156 (Siam: type in British Mus.).

Clytus annularis, Fabr., 1801, Syst. Eleuth. **2**: 352.

Callidium bidens Weber, 1801, Observ. Ent., 90 (East Indies).

Chlorophorus annularis, Chevrolat, 1863, Soc. Sci. Liege, Mem. **18**: 290.—Kano (after Matsumura), 1930, Biogeogr. Soc. Japan, Bull. **1** (3): 240, 242 (Bonins).—Gressitt, 1942, Lingnan Nat. Hist. Mus., Sp. Pub. **1**: 32, fig. 22 (habits).— Swezey, 1942, B. P. Bishop Mus., Bull. **172**: 170 (Guam).—Gressitt, 1951, Longicornia **2**: 275.

Caloclytus annularis, Gahan, 1906, Fauna of India, Col. Ceramb., 43.

Body pitchy, reddish on parts of elytra and legs, largely clothed with yellow pubescence except for the following dark markings: an inverted Y on pronotum with a spot on each side of it anteriorly; on each elytron a basal elongate lunule which is barely closed ectoapically, a sinuous band commencing along suture beside lunule, curving across disc behind lunule and with a narrow connection to it, and bending posteriorly along external margin, and lastly a large oval preapical spot.

Head much narrower than prothorax. *Antenna* nearly two-thirds as long as body. *Prothorax* nearly round, granulate. *Elytra* long; each emarginate-truncate apically. First hind tarsal segment about as long as following combined.

Length 12-14 mm., breadth 2.7-3.2 mm.

DISTRIBUTION: East Asia, Japan, Ryukyu, Taiwan, Philippines, Bonins, Marianas.

BONIN IS. Recorded by Kano.

S. MARIANA IS. SAIPAN: 1941, Matusita. GUAM: 1911, Fullaway, 1923, Hornbostel; Merizo, Bryan; Barrigada, Swezey; Yona, Sept. 1937, Oakley; Pt. Oca, May 1945, G. Bohart and Gressitt, June 1945, R. Bohart; Agana, Sept. 1945, Wallace.

HOST: Dead bamboo. Adults attracted to maize tassels (Swezey and Oakley).

39. **Chlorophorus boninensis** Kano.

Xylotrechus boninensis Kano, 1930, Biogeogr. Soc. Japan, Bull. **1** (3): 242, pl. 15, fig. 3, *nom. nud.*

Chlorophorus boninensis Kano, 1933, Kontyû **7** (3): 135, fig. (Bonins; type in Kano coll.; present status uncertain).

Body black, clothed beneath and on head, antenna and legs with olive-gray pubescence and above with ochraceous-yellow pubescence marked with the following black marks: four small round spots across middle of pronotum, the one on side slightly anterior to pair on disc, each elytron with an externally open lunule near base, a transverse band at middle and slightly broader suboblique band at beginning of last quarter.

Head small. *Antenna* two-thirds as long as body. *Prothorax* oval. *Elytra* narrowed posteriorly, each obliquely truncate apically. First hind tarsal segment as long as remaining combined.

Length 11-13 mm., breadth 2.8-3.2 mm.

DISTRIBUTION: Bonin Is.

BONIN IS. CHICHI JIMA: Three (US, BISHOP), July 1949, Langford, Mead.

The above specimens do not agree perfectly with the elytral pattern shown in Kano's colored figure (1933), which is reproduced in black and white with the original description. Our specimens are very close to that figured as *C. yayeyamensis* Kano by Umeya [1954, Shin-Konchū **7** (9): 21, fig. 2] from Hachijo Island, north of the Bonins.

40. Chlorophorus muscosus (Bates). (Figure 11, *b*.)

Clytanthus muscosus Bates, 1873, Ann. Mag. Nat. Hist. IV, **12**: 198, (Hyogo, Japan; type in British Mus.).

Chlorophorus muscosus, Aurivillius, 1912, Coleopt. Cat. **39**: 398.—Gressitt, 1937, Kontyû **11**(4): 321 (Amami-Oshima).

Chlorophorus bifasciatus Kano, 1933, Kontyû **7** (3): 135 (Izu-Oshima).

Body blackish, clothed with olive-green pubescence except for a vague blackish area on center of pronotum and three transverse black bands on elytra, the first subbasal, the second median and the third slightly closer to middle than apex; pubescence at sides of ventral surfaces pale yellow green.

Head narrow. *Antenna* three-fifths as long as body. *Prothorax* ovate, narrowed distally, granulose. *Elytra* narrow, subparallel from just behind humeri; each obliquely truncate apically. First hind tarsal segment fully as long as remaining combined. Length 11.5-12 mm., breadth 2.8-3 mm.

DISTRIBUTION: Southern Japan, Amami-Oshima, Izu Is., Bonin Is.

BONIN IS. CHICHI JIMA: Two (US, BISHOP), June 1949, Mead, July 1951, R. Bohart.

Genus **Demonax** J. Thomson

Demonax Thomson, 1860, Clasif. Ceramb., 226 (type: *D. nigrofasciatus* Thomson; Moluccas).

Grammographus Chevrolat, 1863, Soc. Sci. Liege, Mem. **18**: 285 (type: *G. lineatus* Chevrolat).

Elizira Pascoe, 1869, Ent. Soc. London, Trans. III, **3**: 637 (type: *Clytus balyi* Pascoe).

This genus is characterized by its slender body, its slender antenna with third and fourth segments more or less strongly spined endoapically, and its long and slender legs with long first hind tarsal segment. The genus is Oriental, and the following is the first species from Oceania.

41. Demonax palauanus Gressitt, n. sp. (fig. 12, *a*).

Male: Black, largely clothed with thin gray pubescence, which is denser and more whitish gray on elytra except for the following three solid black bands: first a short distance behind base, incomplete, transverse but extending onto humerus and, at inner end, narrowing and curving forward toward scutellum, but not reaching it or suture; second broad, separated from first by less than its own width, starting at middle of side and extending obliquely forward to suture; third wider than second, wider than its distance from second or apex, its anterior margin subtransverse and posterior margin slightly oblique. Pronotum with a vague transverse blackish band on each side of center.

Head much narrower than prothorax, finely granulose with some shallow punctures on sides of occiput. *Antenna* as long as body, slender; third segment with spine three-fourths as long as fourth segment; spine of fourth segment just over one-half as long as fifth segment; third segment as long as scape, longer than fourth, and shorter than fifth segment. *Prothorax* unevenly globose, fully as broad as elytra, much broader between middle and base than between middle and apex; surface with spaced granulations or short irregular ridges. *Elytra* very slightly narrowed posteriorly, sinuate-truncate apically with outer angle of each with a short acute tooth; surfaces finely punctured. Middle and hind femora arched basally, then nearly straight; hind femur extending well beyond elytral apex; tibiae nearly straight; first hind tarsal segment nearly twice as long as following combined. Length 7.5 mm., breadth 1.6 mm.

Female: Head, prothorax, and first two antennal segments strongly tinged with pinkish red. Antenna nearly four-fifths as long as body; spine of third segment nearly two-thirds as long as fourth segment; spine of fourth one-half as long as fifth. Length 8.2 mm., breadth 2 mm.

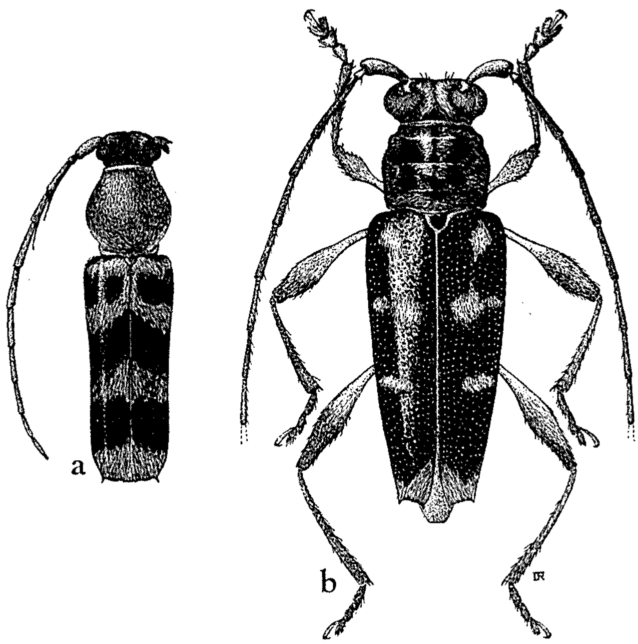


FIGURE 12.—a, *Demonax palauanus;* b, *Glaucytes argentea.*

Holotype, male (US 62583), east Ngatpang, on east side of Ngaremedu Bay, 65 m., Babelthuap I., Palau, Dec. 10, 1952, Gressitt; allotype, female (CM), Garakayo (Ngergoi) I., north of Peleliu, southern Palau, Aug. 9, 1945, Dybas; paratype, female (BISHOP), Koror, Feb. 15, 1948, Dybas.

DISTRIBUTION: Western Caroline Is. (Palau).

This species differs from *D. substitutus* Gressitt of Taiwan in having the prothorax less cylindrical and broader behind middle than anteriorly, the antenna longer and with longer spines on third and fourth segments, and the elytral bands of more equal width and spacing.

Tribe GLAUCYTINI

Genus **Glaucytes** J. Thomson

Glaucytes Thomson, 1858, Archiv. Ent. **1**: 423 (type: *Cerambyx scriptus* Fabr.=*interrupta* Olivier; Mauritius).

Head somewhat strongly inclined; third antennal segment long; prothorax narrowed anteriorly; elytra with pubescent marks in depressed areas.

This genus is principally centered in the Malagasy and Papuan Subregions, with one species each in Ceylon, Samoa, and Palau.

42. Glaucytes argentea Gressitt, n. sp. (fig. 12, *b*).

Female: Dark reddish castaneous, paler on elytral bases, abdomen, and femoral clubs; femoral petioles testaceous; tarsi and apices of tibiae nearly black. Clothed in part with silvery pubescence: thinly on head and prothorax, but glabrous on genal angle, median line of frons, center of occiput, and along a median stripe of varying width, and three narrow transverse lines, and subglabrous on two areas on each side of pronotum between the transverse lines; each elytron silvery along posterior three-quarters of suture and on four bands of roughly equal area and spacing: first slightly longer than broad, just behind middle of base, second transverse and slightly oblique, not reaching margin or suture, wider at inner end and constricted in middle, third similarly oblique and free, but not widened at inner end, and fourth covering apex and extending obliquely forward along suture; ventral surfaces pubescent on most of side of each, with an oblique glabrous band on side of metathorax and the pubescence terminating obliquely on each abdominal segment. Femora pedunculate and slightly clavate. Length 9 mm., breadth 2.8 mm.

Holotype, female (US 62584), east Ngatpang, on east side of Ngaremedu Bay, 65 m., Dec. 6, 1952, light trap in native jungle, Gressitt.

DISTRIBUTION: Western Caroline Is. (Palau).

This species differs from *G. scitula* Pascoe of the Moluccas in having the second elytral band not reaching the suture and somewhat constricted in the middle as well as broadened at the inner end and in having the glabrous areas of the pronotum in part micropunctulate or with minute pubescence.

SUBFAMILY LAMIINAE

Head generally vertical in front; fore tibia obliquely grooved internally; middle tibia obliquely grooved externally. Larval head capsule longer than broad, narrowed posteriorly.

KEY TO MICRONESIAN TRIBES OF LAMIINAE

1. Antennal scape with a cicatrix (partly margined flat area at apex) 2
   Antennal scape without a cicatrix 4

2(1). Middle tibia with an external preapical groove 3
   Middle tibia lacking an external preapical groove; prothorax not strongly tuberculate at middle of side; body less than three times as long as broad .... **Mesosini**

3(2). Antennal scape generally closed, that is, enclosed by a ridge (open in *Dihammus*); antenna not generally stout and spiny .... **Lamiini**
   Antennal scape open internally; antenna stout and spiny; body very large .... **Batocerini**

4(1). Middle coxal cavity open externally to epimeron 5
   Middle coxal cavity closed externally to epimeron 8

5(4). Tarsal claws divergent, forming an angle of less than 90 degrees 6
   Tarsal claws divaricate, forming an angle of 180 degrees; antenna and legs very long; prothorax long and cylindrical .... **Dorcaschematini**

6(5). Middle tibia with an external preapical oblique groove 7
   Middle tibia lacking an external groove; prothorax broad, often toothed at side near anterior end .... **Niphonini**

7(6). Prothorax strongly toothed at side, as broad as elytra; antennal scape clavate .... **Homonoeini**
   Prothorax cylindrical, untoothed, narrower than elytra; antennal scape slender .... **Apomecynini**

8(4). Tarsal claws divergent, forming an angle of less than 90 degrees .... **Ptericoptini**
   Tarsal claws divaricate, forming an angle of 180 degrees .... **Acanthocinini**

TRIBE LAMIINI

KEY TO MICRONESIAN GENERA OF LAMIINI

1. Cicatrix on antennal scape almost completely closed; prothorax non-tuberculate laterally, rather evenly granulose on disc; elytra granulose .... **Pelargoderus**
   Cicatrix on antennal scape open internally; prothorax strongly toothed laterally, generally smooth with feeble swellings and sparse punctures on disc .... **Dihammus**

Genus **Pelargoderus** Serville

Pelargoderus Serville, 1835, Soc. Ent. France, Ann. **6**: 72 (type: *P. vittatus* Serville; Indonesia).

Nanyohammus Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2): 117 (type: *N. luteosparsus* Matsushita; Palau).

Large; head deeply grooved between antennal supports; eye nearly divided; prothorax

slightly broader than long, unarmed; elytra narrowed and obliquely truncate apically, granulose; mesosternal process tuberculate.

This genus is primarily Indonesian, Philippine, and Papuan.

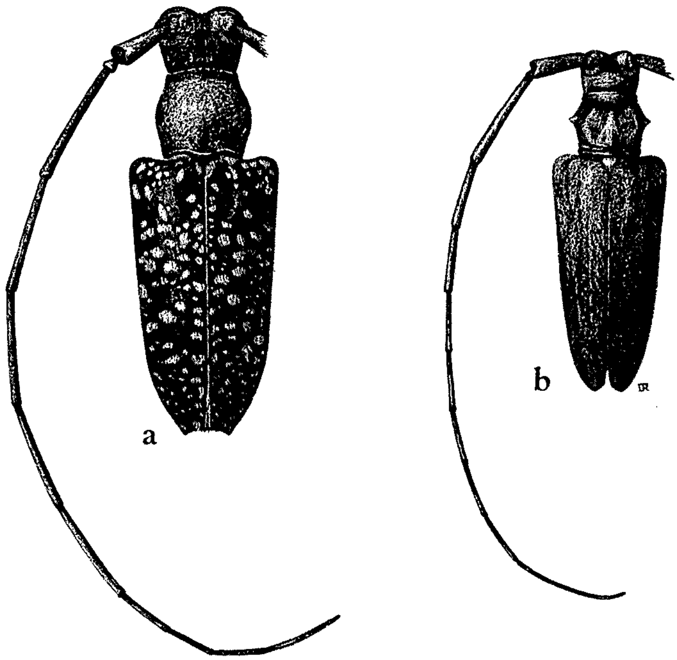


FIGURE 13.—**a**, *Pelargoderus luteosparsus;* **b**, *Dihammus fulvicornis hachijoensis.*

43. Pelargoderus luteosparsus (Matsushita). (Figure 13, *a.*)

Nanyohammus luteosparsus Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2) : 118, fig. (Palau; type in Hokkaido Univ.).—Esaki, 1941, Sixth Pacific Sci. Congr., Berkeley, Proc. **4** : 412 (attacks cacao).—Gressitt, 1954, Insects of Micronesia **1** : 173.

Pelargoderus luteosparsus, Breuning, 1944, Nov. Ent. **14** (Suppl. 3) : 233.

Male: Black; prothorax red except for anterior and posterior margins; elytra and ventral surfaces heavily spotted with ochraceous pubescence; head with inner and lower margin of eye bordered with dense ochraceous pubescence.

Head granulose to rugose, subacutely concave between antennal insertions. *Antenna* nearly twice as long as body; scape stout, granulose, much shorter than fourth segment, which is shorter than third. *Prothorax* nearly as long as broad, feebly convex at side; disc feebly granulose-rugose. *Elytra* each narrowed in distal half and rounded-truncate apically, granulose-punctate to apex. Length 28 mm., breadth 8.5 mm.

Female: Antenna two-fifths to three-fifths again as long as body. Length 22-30.5 mm., breadth 6.7-9.7 mm.

DISTRIBUTION: Western Caroline Is.

PALAU. BABELTHUAP: Irrai (Airai), on breadfruit tree, Apr.-May, 1949,

Langford. KOROR: One (US), July 1946, Oakley, at light. PELELIU: One (CM), east coast, Aug. 1945, Dybas.

HOSTS: *Theobroma cacao* (bores in living trees); also *Artocarpus altilis* and undetermined native tree.

Genus **Dihammus** J. Thomson

Dihammus Thomson, 1864, Syst. Ceramb., 80, 381 (type: *Monochamus longicornis* Thomson=*australis* Boisduval; Papuan Subregion).

Haplohammus Bates, 1884, Linn. Soc. London, Jour. **18**: 239 (type: *Monohammus luxuriosus* Bates).

Neanthes Pascoe, 1888, Ann. Mag. Nat. Hist. V, **2**: 372 (type: *Monohammus curialis* Pascoe).

Astynoscelis Pic, 1905, Mat. Longic. **5** (1): 8 (type: *A. longicornis* Pic).

Niphohammus Matsushita, 1932, Ins. Matsumurana **6** (4): 170 (type: *N. korolensis* Matsushita).

Saitoa Matsushita, 1937, Kontyû **11** (1-2): 104 (type: *A. teneburosa* Matsushita).

Often large; antenna long; scape with an open cicatrix; prothorax strongly tuberculate laterally, slightly uneven on disc.

The genus is primarily Oriental and Melanesian, extending to Japan, Kusaie, Samoa, and Australia.

KEY TO MICRONESIAN SPECIES OF DIHAMMUS

1. Elytral apices toothed or spined externally; elytral pubescence with varying patterns according to angle of light.......... 2
   Elytral apices oblique or subrounded, not toothed.......... 3

2(1). Elytra each sharply spined ectoapically; Woleai to Kusaie.......... **fasciatus**
   Elytra each slightly toothed ectoapically; Palau.......... **magneticus auripilis**

3(1). Pronotum and elytra subglabrous, black or dark reddish; tibiae with contrasted reddish pubescence distally.......... 4
   Pronotum and elytra largely pubescent.......... 5

4(3). Scape rugose; pronotum transversely wrinkled in center; dorsum black; elytra with golden pubescence near apices; Palau.......... **korolensis**
   Scape largely smooth; pronotum without transverse wrinkles; dorsum pitchy red to blackish, without golden pubescence at apices; Ponape.......... **bennigseni**

5(3). Dorsum marked with glabrous punctures and some areas of thin pubescence; third and fourth antennal segments thickened at apices.......... 6
   Dorsum entirely closely pubescent with punctures visible only as depressions; third and fourth antennal segments narrowed at apices.......... **fulvicornis hachijoensis**

6(5). Head densely pubescent; prothorax with dense pubescence marked with large glabrous punctures, and with few long hairs.......... **marianarum**
   Head nearly glabrous; prothorax with extremely short pubescence, nearly glabrous distally and basally, and with about 30 long hairs on each side.......... **trucanus**

44. Dihammus marianarum (Aurivillius).

Monochamus (Haplohammus) Marianarum Aurivillius, 1908, Deutsche Ent. Zeitschr. **1908**: 216 (Marianas; type in Riksmuseum, Stockholm).

Dihammus marianarum, Aurivillius, 1922, Coleopt. Cat. **73**: 98.—Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2) : 119 (Saipan).—Ohbayashi, 1941, Tenthredo **3** (3) : 224.—Swezey, 1942, B. P. Bishop Mus., Bull. **172**: 169.—Breuning, 1944, Nov. Ent. **14** (Suppl. 3) : 483. —Gressitt, 1952, Ent. Soc. Am., Ann. **45**: 50.

Dihammus ohzui Ohbayashi, 1941, Tenthredo **3** (3) : 224 (Rota and Saipan; type in Ohbayashi coll.) ; new syn.

Male: Rusty brown to blackish brown, extensively clothed with golden-tawny to grayish pubescence, which has some thinner to glabrous areas on elytra as well as a slight suggestion of pubescence of varying shades and reflections; ventral pubescence more uniform, but with a small glabrous area on side of each abdominal segment.

Head rounded-obtusely concave between antennal insertions, sparsely punctured. *Antenna* more than three times as long as body; scape smooth, three-fifths as long as third segment. *Prothorax* a little broader than long, strongly grooved transversely near apex and base, strongly tuberculate laterally, subacute; disc with three feeble swellings and a few punctures on basal two-thirds. *Elytra* rather finely punctured to apices, each subobliquely truncate. Length 21-33 mm., breadth 7-11.4 mm.

Female: Antenna about twice as long as body. Length 14.5-29 mm., breadth 4.8-10 mm.

DISTRIBUTION: Mariana Is.

S. MARIANA IS. SAIPAN: Garapan, Asugonno (As Gonno), Sept. 1941, Matusita, Nov. 1944, E. Hagen; As Mahetog, Kalabera, Papago, hills east of Garapan, Lake Susupe, Halaihai-As Teo, Mt. Tagpochau, 373 m., Nov. 1944 to May 1945, Dybas (several on breadfruit trunks), May 1948, Langford; Magicienne Bay, Tanapag, Jan. 1949, Maehler. TINIAN: Mt. Lasso, west slope, Mar. 1945, Dybas. ROTA: The type of *D. ohzui* came from Rota. GUAM: 1911, Fullaway, 1923, Hornbostel; Agana, Merizo (AMNH); many localities, 1936, Swezey and Usinger, 1937 Oakley, Jan. 1945, R. Bohart; Pt. Oca, Pt. Ritidian, May 1945, Baker, Dybas, G. Bohart, Gressitt; Tumon Bay, Apr. 1946, Krauss; Com. Mar. Hill (southwest of Agana), Haputo Pt., Mar. 1948, Maehler; Talofofo to Umatac, Jan. 1949, Potts, Sept. 1949, D. Anderson; Mt. Lamlam, Oct. 1952, Krauss.

HOSTS: *Artocarpus, Ficus, Pithecellobium, Hibiscus, Theobroma, Anacardium, Mangifera, Barringtonia,* and other trees (dead branches; rarely, live branches).

45. Dihammus fulvicornis hachijoensis Gressitt, n. subsp., (fig. 13, *b*).

Female: Pitchy brown, tinged with reddish brown on base of mandible, gena, side of prothorax, external margin of elytron, much of abdomen and side of metathorax, and on antenna except for first two segments, apices of remainder, and base of third. Body densely clothed with velvety brown pubescence of a slightly purplish tinge, paler on scutellum, tibiae, tarsi, and proximal portions of third and following antennal segments.

Head convex in front, impunctate except for a few shallow punctures between upper eye-lobes; vertex forming an angle of about 95 degrees between antennal supports; inferior eye-lobe about twice as deep as gena below it. *Antenna* nearly twice as long as body; scape gradually thickened to apex, slightly uneven and feebly punctured; third to fifth segments flattened and narrowed at extreme apices; third long; fourth somewhat longer than scape, barely longer than fifth; remainder decreasing, but last about as long as third. *Prothorax* as long as breadth at base, with a strong nipple-shaped tubercle at side; disc uneven, subcarinate along median line and on each side with a slight raised area separated from median line by a depression; depressed areas and some of raised areas moderately punctured. Scutellum rounded trapeziform. *Elytra* narrow, separately subrounded apically, deeply and irregularly punctured on basal three-fourths. *Ventral surfaces* impunctate; last abdominal sternite rounded-emarginate. Length 22.2 mm., breadth 6.75 mm.

Holotype, female (CAS), Hachijo Jima, Izu Shichito, between Japan and Bonin Is., June 1927, Yamada. Presented to me in 1931 by the late Dr. M. Yano.

DISTRIBUTION: Izu Seven Is. (Hachijo I.), just north of Micronesia.

This species differs from *D. fulvicornis* (Pascoe) in having the antenna paler, with the scape distinctly broadest at extreme apex, the third to fifth segments distinctly narrowed at extreme apices, and the elytral punctures less disposed in rows.

46. Dihammus korolensis (Matsushita).

Niphohammus korolensis Matsushita, 1932, Ins. Matsumurana **6** (4): 171, fig. 3 (Koror; type in Hokkaido Univ.).

Dihammus lupinus Kriesche, 1936, Ent. Blätter **32** (2): 66 (Palau).

Dihammus (Niphohammus) korolensis, Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 149 (Ngeremlengui).

Dihammus korolensis, Breuning, 1944, Nov. Ent. **14** (Suppl. 3): 485.

Male: Black, moderately shiny; tarsi, distal portions of tibiae, and posterior portions of sides of abdominal segments clothed with dense golden-auburn pubescence.

Head sparsely punctured, obtuse between antennal supports. *Antenna* more than twice as long as body; scape rugose, slightly shorter than fourth segment, which is distinctly shorter than third. *Prothorax* transverse, cylindrical at base and apex, with side obtuse and with an acute tubercle; disc swollen on each side of middle and on median line behind center, sparsely punctured, and with an obtuse depression just anterior to tubercles. *Elytra* narrowed and each very narrowly truncate apically, distinctly and subasperately punctured on basal two-thirds. Length 16.5-27 mm., breadth 5.5-9 mm.

Female: Antenna two-thirds again as long as body. Elytra less narrowed and more rounded apically. Length 17.5-27 mm., breadth 6-9 mm.

DISTRIBUTION: Caroline Is.; 20 specimens.

PALAU. BABELTHUAP: Ngaremlengui, Apr. 1936, Ono; east coast, Dec. 1947, Dybas. KOROR: Nov. 1947, at light, Dybas, Apr. 1949, Langford, Aug. 1952, Beardsley. NGERGOI (Garakayo): Aug. 1945, Dybas, one in dry *Pandanus* leaf; Sept. 1945, Davison. PELELIU: East coast, Aug. 1945, Jan. 1948,

Dybas. ANGAUR: Oct. 1944, Ford and Aug. 1945, Feb. 1948, Dybas, two on *Pandanus* leaves.

HOST: Possibly *Pandanus*.

47. Dihammus trucanus Kriesche.

Dihammus trucanus Kriesche, 1936, Ent. Blätter **32** (2) : 66 (Truk; type in Zool. Mus., Berlin ?).

Female: Pitchy black, tinged with dark reddish on head, prothorax, antenna, and ventral surfaces. Body clothed with pale tawny-buff pubescence, particularly on postbasal portions of elytra and on posterior portions of metathorax and abdominal sternites; elytra with subglabrous splotches on basal two-thirds; pronotum thinly pubescent, subglabrous at apex and base; antenna more closely pubescent and paler tawny buff distally; scutellum clothed with goldish hairs.

Head with only a few fine punctures on each side of frons, and a very few between upper eye-lobes; vertex obtusely rounded-concave; inferior eye-lobe one-half again as deep as its distance from genal angle. *Antenna* somewhat less than twice as long as body; scape roughly punctured basally; third segment slightly longer than last; fourth and fifth subequal. *Prothorax* with a very strong, tapering tubercle at side; disc sparsely punctured, with some larger punctures on each side of center, and a raised area just behind center. Scutellum emarginate apically. *Elytra* long, separately subrounded apically, finely and irregularly punctured on basal two-thirds. Length 31.5 mm., breadth 9.4 mm.

Allotype, female (US 62585), Wena (Moen), at light, Mar. 1949, Langford.

DISTRIBUTION: Eastern Caroline Is. (Truk).

This species was synonymized with *D. bennigseni* by Breuning, but it differs in having the body more pubescent, particularly on the elytra and the antenna, and in having the prothoracic tubercle much more acute and the elytra finely punctured instead of asperate-punctate or nodose-punctate.

48. Dihammus bennigseni (Aurivillius).

Monochamus (Haplohammus) Bennigseni Aurivillius, 1908, Deutsche Ent. Zeitschr. **1908**: 216 (Ponape; type in Riksmuseum, Stockholm).

Dihammus Bennigseni Aurivillius, 1922, Coleopt. Cat. **73** : 97.—Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6) : 149 ("Palau").—Breuning, 1944, Nov. Ent. **14** (Suppl. 3) : 483.

Male: Pitchy black, more reddish pitchy on elytra except on humeral ridge. Body nearly glabrous above, clothed with thin golden-brown pubescence beneath and on tarsi and distal halves of tibiae.

Head nearly impunctate, obtusely concave between antennal supports. *Antenna* fully three times as long as body; scape rugose basally, smooth distally, gradually thickened, two-thirds as long as fourth segment, three-fifths as long as third. *Prothorax* transverse, strongly, but not very sharply, acute laterally; disc with three feeble swellings and a few fine punctures. *Elytra* rather finely punctured on basal two-thirds, subasperately so basally. Length 26-35 mm., breadth 9-11 mm.

DISTRIBUTION: Eastern Caroline Is.

PONAPE. Three males (US, BISHOP), one, Mt. Temwetemwensekir,

400 m., June-Sept. 1950, Adams, two 1928, Uchiyama. One male (MCZ), "Ascension Is., S. Sea" [Ponape], is quite red.

Four females presumed to have been taken by Uchiyama on Ponape in 1928 were in the Agriculture Experiment Station collection at Colonia and were brought to Bishop Museum in 1948. They are more likely specimens of *D. marianarum* from Saipan than the female of *D. bennigseni,* as they are almost entirely covered with tawny pubescence and thus do not resemble male *bennigseni.* I question Ono's Palau label (Blair record).

49. Dihammus fasciatus (Montrouzier).

Monochamus fasciatus Montrouzier, 1855, Soc. Agric. Lyon, Ann. II, **3**: 298 (Woodlark).

Monochamus acanthias Pascoe, 1875, Ann. Mag. Nat. Hist. IV, **15**: 65 (Australia).

Dihammus acanthias and *fasciatus,* Aurivillius, 1922, Coleopt. Cat. **73**: 97, 98.

Dihammus acanthias, Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6) : 148 (Truk).

Dihammus (Niphohammus) auripilis, Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6) : 149 (Truk).

Dihammus fasciatus, Breuning, 1944, Nov. Ent. **14** (Suppl. 3) : 480.

Male: Brown to pitchy, clothed with silky golden pubescence of changing reflections; antenna and legs reddish.

Head with a few punctures on frons, none on occiput, and a shiny cavity in median groove behind antennal supports. *Antenna* nearly three times as long as body; scape smooth, thickened in middle. *Prothorax* transverse, strongly tuberculate; disc with a few punctures in slightly depressed areas. *Elytra* finely and subdensely and irregularly punctured; apex of each truncate and with a strong spine at outer angle. Length 17-21 mm., breadth 5.5-6 mm.

Female: Antenna slightly more than twice as long as body. Length 15-19 mm., breadth 4.5-5.5 mm.

DISTRIBUTION: Australia, New Guinea, Solomons, Caroline Is.

CAROLINE ATOLLS. WOLEAI: Nov. 1950, Langford; Utegal I., Feb. 1953, Beardsley. IFALUK: Ifaluk I., July 1953, Bates. FARAULEP: Faraulep I., Sept. 1952, Krauss. KAPINGAMARANGI: Touhou I., Werua I., July-Aug. 1954, Niering.

TRUK. TONOAS (Dublon): Jan. 1936, Ono, Feb. 1948, Maehler. WENA (Moen): Civ. Ad. Area [Nantaku], Feb. 1949, Potts; Mt. Teroken [Chukumong], Dec. 1952, Gressitt.

KUSAIE. Many, Matanluk, 22 m., under breadfruit bark and at light, Jan. 1953, Gressitt; Mutunlik, "Hill 541," 165 m., light trap; Songkosra, 120 m., Mar.-Apr. 1953, Clarke.

HOST: *Artocarpus altilis* (generally dead branches and trunks).

50. Dihammus magneticus auripilis (Matsushita).

Niphohammus auripilis Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2) : 119 (Palau ; type in Hokkaido Univ.).

Dihammus magneticus, Breuning, 1944, Nov. Ent. **14** (Suppl. 3) : 479 (part : Palau).

Male: Dark brown, pale reddish brown on much of antenna and legs; dorsum clothed with close golden pubescence lying in different directions and presenting an irregular pattern which varies with angle of vision; each elytron with a few irregular dark spots behind middle; ventral surfaces and legs clothed with thin buff pubescence.

Head very obtusely concave between antennal insertions, punctured only on frons, with six or seven punctures on each side. *Antenna* three times as long as body; scape stout, about one-half as long as third segment; fourth to tenth subequal. *Prothorax* with side strongly convex and nipple-shaped; disc slightly irregular, with about 15 punctures on each side, mostly near middle and at base of lateral tubercle. *Elytra* each obliquely truncate apically with outer angle briefly toothed; disc somewhat finely and irregularly punctured throughout, with a few larger punctures in slight depressions near ends of first and second quarters. Length 11-14 mm., breadth 3.1-3.8 mm.

Female: Antenna two and one-half times as long as body. Length 12-17 mm., breadth 3.6-5.5 mm.

DISTRIBUTION : Western Caroline Is.

PALAU. NGAIANGL: Ngaiangl I., Dec. 1952, Gressitt. BABELTHUAP: Airai [Irrai], Jan. 1948, reared from breadfruit bark, Dybas. KOROR: July 1940, Matusita, Apr. 1949, Langford, May, Nov., Dec. 1952-1953, Beardsley. PELELIU: Several, east coast, Aug. 1945, Dybas, one at light.

HOST: *Artocarpus altilis* (dead).

TRIBE BATOCERINI

Genus **Batocera** Castelnau

Batocera Castelnau, 1840, Hist. Nat. Col. **2** : 470 (type: *Cerambyx rubus* L., southern Asia).

Large, heavy-bodied; antenna thick, spined beneath; prothorax strongly toothed laterally; elytra granulose basally, each generally emarginate-truncate apically.

The genus is widely distributed in eastern Asia and into Melanesia. The following is the only species in Oceania.

51. Batocera oceanica Schwarzer (fig. 14).

Batocera oceanica Schwarzer, 1914, Ent. Mitt. **3** (9) : 281 (Palau; type in Deutschen Ent. Inst.).—Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6) : 149.—Gilmour and Dibb, 1948, Spolia Zeylanica **25** (1) : 24, pl. 2, fig. 7.

Batocera kolbei Kriesche, 1915, Archiv Naturgesch. A, **80** (11) : 122 (Palau).

Male: Black, with a deep reddish tinge on posterior portions of elytral discs. Clothed with goldish pubescence on prothorax, particularly at anterior border and side of posterior border, and with orange-brown pubescence on scutellum, part of basal fifth of elytra and much of ventral surfaces, thinner and grayish brown along median portions of abdominal sternites.

Head finely punctured. *Antenna* nearly twice as long as body, briefly toothed beneath to last segment. *Prothorax* transversely grooved and subrugose, acutely spined. *Elytra* coarsely granulate on basal fifth. One male has two distinct asymmetrical orange spots on each elytron, one close to middle, the other nearer base. Length 37-63 mm., breadth 12.5-21 mm.

Female: Antenna one-fifth longer than body. Length 51 mm., breadth 17.5 mm.

Larva: Prothorax flattened, wider than rest of body. Head capsule, excluding mouthparts, nearly one-half again as long as broad; exposed portion black except for labrum, clypeus, and antenna; mandible with a single obtuse tooth on upper cutting edge, and with some transverse grooves on central portion; clypeus smooth and nearly glabrous; frons with sparse shallow punctures; antenna short, with second and third segments barely protruding from first; a tubercle just behind antenna. Pronotum reddish brown, a narrow hairy band near anterior margin and basal half covered with narrow transverse granules. Dorsal abdominal ampullae each with two transverse grooves bordered on both sides of each with tubercles, which also border two or three branch grooves from ends of transverse grooves.

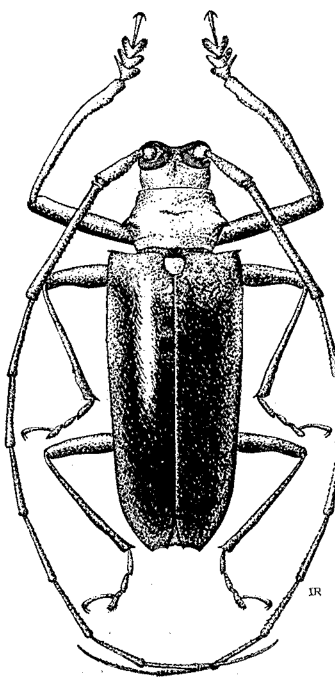


FIGURE 14.—*Batocera oceanica.*

DISTRIBUTION: Western Caroline Is.

PALAU. BABELTHUAP: Ngerehelong, Jan. 1948; Ulimang, Dec. 1947, Dybas; east Ngatpang, 65 m., east of Ngeremedu Bay, Dec. 1952, Gressitt

(adult and larva). KOROR: Oct. 1948, Doutt; Limestone Ridge, Jan. 1948, Dybas.

HOST: Probably *Artocarpus* (breadfruit).

TRIBE MESOSINI

Genus **Coptops** Serville

Coptops Serville, 1835, Soc. Ent. France, Ann. **4**: 64 (type: *C. parallela* Serville=*aedificator* Fabr.; Africa, southern Asia).

Body stout; eye divided; antenna not much longer than body; scape about as long as third antennal segment; prothorax with a tubercle at side near anterior margin, and some nodes on disc; elytra broadly rounded apically.

This genus is widely distributed in Africa and Asia.

52. Coptops hirtiventris Gressitt (fig. 15).

Coptops hirtiventris Gressitt, 1937, Kontyû **11** (4): 324, fig. 5 (Haha Jima; type in Calif. Acad. Sci.).—Breuning, 1939, Nov. Ent. **9** (Suppl. 3): 510 (part).

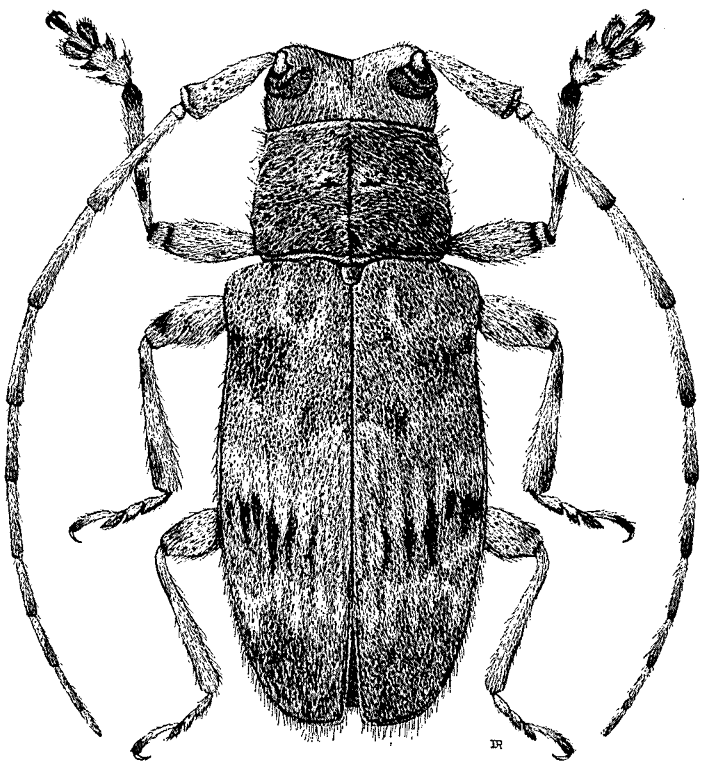


FIGURE 15.—*Coptops hirtiventris.*

Female: Reddish brown to dark brown, almost entirely clothed with varied pale-buff to brown pubescence, which is largely pale above and dotted with punctures; elytra clothed with buff, varied with narrow longitudinal stripes or zigzag lines of white or brown, which largely comprise two irregular whitish postmedian bands with a partial brown band between and an irregular brownish band on second quarter; ventral surfaces pale buff with a few brown spots, and with many fine erect white hairs; femora and tibiae with still longer white hairs.

Head broad, finely punctured; vertex shallowly concave. *Antenna* hardly longer than body; scape and third segment subequal in length, each barely longer than fourth. *Pronotum* having disc with three distinct swellings on center and other slight irregularities. *Elytra* distinctly punctured throughout, nearly parallel-sided. Length 17 mm., breadth 6.8 mm.

Male: Antenna one-fourth longer than body; postmedian node of pronotum not distinct; elytra narrowed posteriorly. Length 15.6 mm., breadth 5.7 mm.

DISTRIBUTION: Bonin Is.

BONIN IS. HAHA JIMA: The type was taken in May 1934. A male (Agric. Tokyo), Ogasawara (island not specified), was taken in 1912 by Kuwana.

The elytral pattern has faded in the type and does not now have as much contrast as is shown in the photograph published with the original description. Breuning synonymized his *C. japonica* with this species, but the two are different. The male taken by Kuwana differs further from the type in having the pubescence much thinner, the dorsum finely mottled with tawny and brown and without any pattern and the venter more heavily dotted with dark brown. It is not designated allotype, as it might be from another island and might represent another subspecies.

TRIBE DORCASCHEMATINI

Genus **Olenecamptus** Chevrolat

Olenecamptus Chevrolat, 1835, Mag. Zool. **5**: ins. pl. 134 (type: *O. serratus* Chevrolat = *bilobus* Fabr.; eastern Asia).

Authades Thomson, 1857, Archiv. Ent. **1**: 191 (type: *A. indianus* Thomson).

Ibidimorphum Motschulsky, 1860, Schrenck's Reisen Amurland Col., 153 (type: *I. octopustulatum* Motschulsky).

Slender; antenna long and slender; scape swollen asperate; third antennal segment several times as long as scape; prothorax longer than broad, transversely wrinkled; legs long and slender.

This genus is found in Africa, southern Asia, and the Papuan area.

KEY TO MICRONESIAN SPECIES OF OLENECAMPTUS

1. Pronotum strongly wrinkled transversely; elytra reddish brown like antenna and legs, lacking general pale pubescence and having a large common basal area of dense creamy pubescence, a large rhomboid central spot of the same; central portion of elytron heavily punctured..**beardsleyi**

Pronotum feebly wrinkled across median portion of disc; elytra brown, clothed with thin pale-buff pubescence and marked with a common postscutellar area, a small spot on each, behind it and above lateral declivity, and a subrounded spot at beginning of apical third, of dense creamy pubescence; central portion of elytron finely punctured..**bilobus lacteoguttatus**

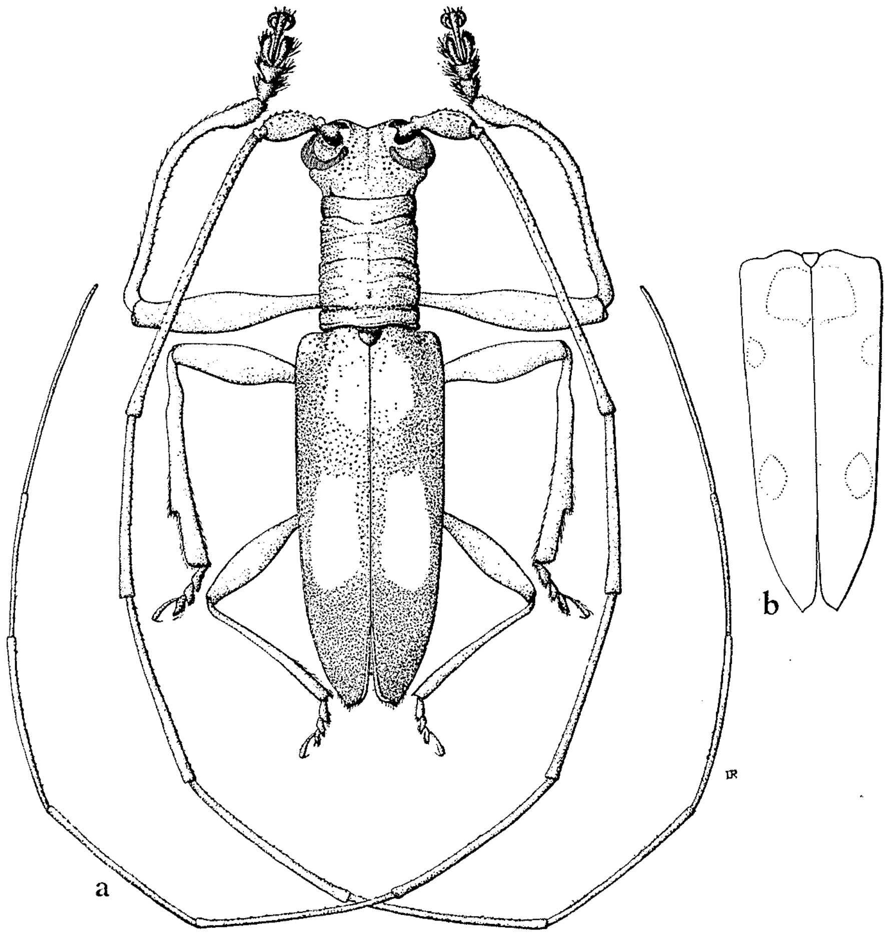


FIGURE 16.—a, *Olenecamptus beardsleyi;* b, *O. bilobus lacteoguttatus,* diagram of elytral spots.

53. **Olenecamptus beardsleyi** Gressitt, n. sp. (fig. 16, *a*).

Male: Reddish brown; pitchy on third and fourth antennal segments except for their apices. Body clothed with moderately dense pubescence which is whitish on abdomen and creamy on head and prothorax, with a brownish stripe along side of head and prothorax; elytra with extremely thin reddish pubescence (giving the impression of being glabrous), with three large and two small marks of thick creamy pubescence which is pure white in certain lights: a large common basal area, starting with scutellum, a large subrhomboid area on center of each, and a narrow stripe on basal two-fifths of lateral declivity.

Head with frons slightly convex, with a small smooth glabrous area above center and a fine raised median ridge; vertex forming very slightly more than a right angle between antennal supports. *Antenna* two and two-thirds times as long as body; scape strongly asperate; third segment reaching nearly to middle of elytra; fourth and following shorter, diminishing. *Prothorax* longer than broad, subcylindrical, slightly irregular, distinctly wrinkled transversely. *Elytra* obliquely very narrowly truncate; deeply and distinctly punctured on basal two-thirds, much more finely so apically. Length 15.5 mm., breadth 3.3 mm.

Female: Antenna two and one-third times as long as body. Length 13.3 mm., breadth 3.1 mm.

Paratypes: Length 11-14 mm., breadth 2.7-3 mm.

Holotype, male (US 62586), Koror, Jan. 1953, at light, J. W. Beardsley; allotype, female (BISHOP 2384), same data; four paratopotypes (US, BISHOP, BM), Jan., Feb. 1953, Beardsley; one paratype (Honolulu Quarantine coll.), Koror, Mar. 15-25, 1948, K. L. Maehler.

DISTRIBUTION: Western Caroline Is. (Palau).

This species differs from *O. bilobus* (Fabr.) in having the vertex narrower and less obtuse between the antennal supports, the pronotum more strongly ridged, the elytra more heavily punctured, lacking a general pale-buff pubescence, and with a single large subcentral pale spot instead of two small ones on each.

54. Olenecamptus bilobus lacteoguttatus Fairmaire (fig. 16, *b*).

Olenecamptus lacteoguttatus Fairmaire, 1881, Le Naturaliste **3** (44) : 359 (Truk; type in Paris Mus.).

Olenecamptus bilobus, Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6) : 149 (Truk).—Breuning, 1940, Nov. Ent. **10** (Suppl. 3) : 554.

Olenecamptus bilobus lacteoguttatus, Dillon and Dillon, 1948, Am. Ent. Soc., Trans. **73** : 229, pl. 10, fig. 7 (Saipan).—Maehler, 1950, Hawaiian Ent. Soc., Proc. **14** (1) : 9 (Guam).

Male: Reddish brown, largely clothed with dense creamy-buff to white pubescence; front of head and ventral surface white; dorsum creamy buff to pale buff with five white spots on elytra, the first a broad common spot just behind scutellum (sometimes largely red), a small spot on each near side at end of basal third and a similar one on disc at end of second third; antenna nearly glabrous, legs clothed with pale gray.

Head rounded-obtuse between antennal supports, with a few punctures behind upper eye-lobe. *Antenna* two and one-half times as long as body; scape stout. *Prothorax* feebly ridged transversely. *Elytra* finely punctured, obliquely truncate. Length 12-24 mm., breadth 2.6-4.8 mm.

Female: Antenna twice as long as body. Length 10-16 mm., breadth 2.6-4 mm.

DISTRIBUTION: Marianas and Truk.

S. MARIANA IS. SAIPAN: Garapan, Sept. 1940, Matusita; many, east of Tanapag, Dec. 1944, As Mahetog area, Jan., June, Aug. 1945, Dybas, Ducoff, and Hagen; Mt. Tapotchau (Tagpochau), Dec. 1949, Maehler. TINIAN: June 1946, Townes. AGIGUAN: Many, June 1952, Kondo, Peterson,

many, July 1954, C. J. Davis. ROTA: June 1946, Townes. GUAM: Dec. 1948, Maehler; Talofofo to Umatac, Jan. 1949, Potts; Yona, Oct. 1952, Krauss.

TRUK. WENA (Moen): Civ. Ad. Area (Nantaku), Mar.-Apr., southern valley Mt. Tonaachau, Feb. 1949, Potts; Mt. Teroken (Chukumong), Feb. 1953, Gressitt. TONOAS (Dublon): Apr. 1936, Ono.

HOSTS: Dead branches of *Ficus* and *Artocarpus*.

In each of the series of 75 specimens taken on Agiguan by Davis the basal elytral spot is bright pink. The species *O. bilobus* (Fabr.) has a wide distribution in southern Asia and the southwest Pacific area.

TRIBE HOMONOEINI

Genus **Caroliniella** Blair

Caroliniella Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 149 (type: *C. aenescens* Blair; Truk).

Fairly large, shiny, flattened, and oblong, with the head turned vertically. Prothorax flat, with a strong tooth at middle of side and a lesser one above and anterior to it.

This quite distinctive genus is endemic to the Carolines.

KEY TO MICRONESIAN SUBSPECIES OF CAROLINIELLA

1. Elytra subglabrous, submetallic black to bronzy brown................**aenescens aenescens**
   Elytra each with a broad pale pubescent stripe from base to end of third quarter and finer pubescence along suture..................................**aenescens palauensis**

55. **Caroliniella aenescens aenescens** Blair.

Caroliniella aenescens Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 151, fig. 10 (Truk; type in Bishop Mus.).

Male: Shiny dark reddish brown with a faint bronzy tinge, darker beneath. Body largely glabrous except for pale pubescence on posterior three-fifths of metepisternum, a small spot on side of neck, two on side of pronotum, and a stripe on elytral epipleuron.

Head deeper than rest of body, raised on postocciput, grooved on occiput, biconvex on frons, sparsely punctured. *Antenna* nearly twice as long as body, tapering; scape clavate, shorter than fourth segment, which is much shorter than third. *Prothorax* transverse, narrowed to a short, acute tooth at side; disc smooth along middle and rugose on rest, with a small tubercle on each side anterior to middle. *Elytra* slightly narrowed posteriorly, rounded apically, flat, moderately punctured. Length 22 mm., breadth 7 mm.

Female: Antenna one-half again as long as body; elytra nearly parallel-sided. Length 23-32 mm., breadth 7.3-10.7 mm.

Larva: Cylindrical; body truncate posteriorly with a single short terminal spine. Head capsule, excluding mouthparts, four-fifths as broad as long, slightly sinuate at side, curved behind antenna, distinctly narrowed and then briefly nearly parallel-sided and evenly rounded behind; mandible acute apically, arcuate internally and broadest just basal to middle; frons and gena smooth, with long widely scattered hairs set in shallow punctures; antenna short; apparently a single ocellus present. Pronotum smooth, with an anterior pigmented transverse area which extends forward almost to anterior margin on median line; posterior area with fine punctures and longitudinal grooves, with sparse hairs before and behind. Dorsal abdominal ampulla with two transverse grooves connected externally

and more or less joined to outer arcuate groove, and with feeble nodes. (Based on Kusaie specimen.)

DISTRIBUTION: Eastern Caroline Is.

CAROLINE ATOLLS. NOMWIN: Five males and nine females (US, BISHOP, CM, AMNH, BM), in coconut crowns, May 1946, Oakley.

TRUK. TON (Tol): Jan. 1949, Langford. TOTIU (Tarik): Type locality, 1936, Ono. WENA (Moen): Several (US, BISHOP, CAS, HSPA, Honolulu Quarantine coll.), Nantaku (Civ. Ad. Area), July 1946, Oakley, Feb., Mar. 1949, Potts, Langford, Maehler.

KUSAIE. Mutunlik, Mar. 1953, light trap, Clarke; Mt. Matante, Feb. 1953, Clarke; larva from Malem, Clarke.

HOST: *Cocos nucifera.* The larva bores in petioles and midribs of living coconut palms, and the adult feeds within fronds just emerging from the bud. Oakley states, for Nomwin, that adults feed in restricted areas between the

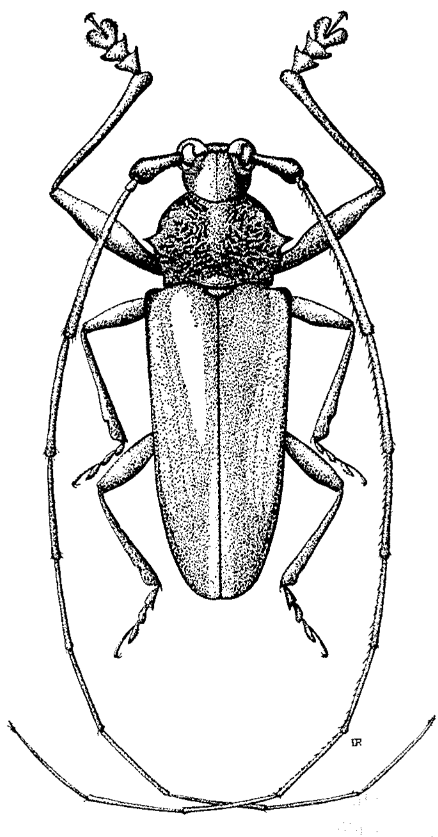


FIGURE 17.—*Caroliniella aenescens palauensis.*

midribs of two coconut fronds just emerging from the bud. Usually about three adults feed together on the tender tissue of the bud, which does not appear to be materially damaged. Individuals are apparently present in most young palms about 6 meters tall, but are difficult to capture without destroying the bud. Oakley did not find larvae. Clarke (Kusaie) noted that one or more larvae appeared to have started where a rat had chewed the base of a petiole, then continued tunneling for a meter along the midrib.

Nomwin specimens are often paler and have some thin pubescence on apical portions of the elytra. Kusaie specimens are largely glabrous.

56. Caroliniella aenescens palauensis Blair (fig. 17).

Caroliniella aenescens palauensis Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6) : 151 (Palau; type in Bishop Mus.).

Male: Reddish brown, pitchy on most of head and prothorax. Each elytron with a broad stripe of pale-tawny pubescence on outer portion of disc from base to end of third quarter and some thinner gray pubescence along suture in apical half; metepisternum with thin gray pubescence.

Head somewhat closely punctured on each side of occiput. *Antenna* twice as long as body; third segment nearly reaching to second third of elytra. *Pronotum* rugose-punctate except in center of disc. *Elytra* hardly punctured in apical third. Length 31 mm., breadth 10 mm.

Female: Antenna two-fifths again as long as body; pronotum more convex; elytra less pubescent. Length 30 mm., breadth 9.5 mm.

DISTRIBUTION: Caroline Is.

PALAU. Only the type, a female, without island designation, is known from Palau, 1936, Ono.

PONAPE. Allotype, male (Hokkaido Univ.), Koronia [Colonia], Mar. 1929, Uchiyama.

It is puzzling that only one specimen each has been taken in Palau and Ponape. Possibly one may be mislabeled, as both Ono and Uchiyama collected in both places. If correctly labeled, an introduction may have been involved. This species could be transported in baskets woven of coconut fronds. However, the differences between the two specimens may be more than sexual.

Tribe NIPHONINI

Key to Micronesian Genera of Niphonini

1. Prothorax without tubercles at side near anterior border; body generally narrow and elytra steeply declivitous posteriorly; antenna generally shorter than body .... **Pteroplophia**

   Prothorax with two or three tubercles on side near anterior border; body broad, gradually declivitous posteriorly; elytra even, without ridges; antenna generally longer than body .... **Prosoplus**

Genus **Pterolophia** Newman

Pterolophia Newman, 1842, Entomologist **1**: 370 (type: *Mesosa? bigibbera* Newman).

Prioneta Blanchard, 1853, Voy. Pôle Sud., Zool. **5**: 66 (type: *P. albosignata* Blanchard).

Praonetha Pascoe, 1862, Jour. Ent. **1**: 348.

Eurycotyle Blessig, 1873, Soc. Ent. Ross., Horae. **9**: 210 (type: *E. maacki* Blessig).

Antenna short, fifth and following segments much shorter than third; prothorax more or less cylindrical; elytra narrowed posteriorly, steeply declivitous apically, often with ridges or tubercles on disc.

This large genus is primarily Oriental, extending into Africa, northeast Asia, and Australia; but it is hardly represented in Oceania.

57. Pterolophia camura (Newman).

Pterolophia camura Newman, 1842, Entomologist **1**: 371.—Gahan, 1907, Mus. Civ. Stor. Nat. Genova, Ann. III, **3**: 85.—Gressitt, 1951, Longicornia **2**: 466.

Pterolophia saipana Ohbayashi, 1941, Tenthredo **3** (3): 225 (Saipan; type in Ohbayashi coll.); new syn.

Praonetha binodosa Bates, 1866, Zool. Soc. London, Proc. **1866**: 350.

Pterolophia binodosa, Schwarzer, 1925, Ent. Blätter **21** (2): 65.—Matsushita, 1933, Hokkaido Imp. Univ., Jour. Fac. Agric. **34** (2): 360.

Male: Dark reddish brown, almost entirely clothed with tawny-buff to dark-brown pubescence: head buff to whitish on frons and vertex, tawny to dark brown on occiput and gena; antenna pale at ends of segments and dark brown in middle; prothorax tawny, with two white stripes, in part edged with dark brown, on disc, and largely dark brown at side; elytra tawny, unevenly mottled with dark brown, largely pale behind humerus, near scutellum and on posterior declivity.

Head with frons deeper than wide, vertex shallowly concave, and inferior eye-lobe about as deep as gena below it. *Antenna* as long as body; scape barely longer than third segment; third longer than fourth. *Prothorax* transverse, feebly convex at side. *Elytra* each strongly tuberculate near base, with a strong carina just before apical declivity and a lesser one on side below it. Length 9-11 mm., breadth 3-3.6 mm.

Female: Antenna slightly shorter than body. Length 9-11 mm., breadth 3.5-4 mm.

DISTRIBUTION: Philippines, Botel-Tobago, Taiwan, Marianas.

S. MARIANA IS. SAIPAN: June, Aug. 1951, R. Bohart. TINIAN: Mt. Lasso, Mar., Apr., Gurgan Pt., Apr. 1945, Dybas; Mt. Lasso, June 1946, Hadden, Townes (sweeping foliage of *Cynometra*), June 1952, at light, Beardsley. ROTA: June 1952, Kondo.

HOST: Possibly *Cynometra* (probably dead twigs).

Genus **Prosoplus** Blanchard

Prosoplus Blanchard, 1852, Voy. Pôle Sud., Zool. **4**: 290 (type: *P. sinuato-fasciatus* Blanchard; New Guinea).

Micracantha Montrouzier, 1861, Soc. Ent. France, Ann. IV, **1**: 271 (type: *Penthea Woodlarkiana* Montrouzier).

Prosacanthus Fauvel, 1862, Soc. Linn. Normandie, Bull. **7**: 163 (type: *P. Chevrolati* Fauvel).

Aegomomus Pascoe, 1864, Ent. Soc. London, Trans. III, **3**: 59 (type: *A. encaustus* Pascoe).

Atyporis Pascoe, 1864, Ent. Soc. London, Trans. III, **3**: 67 (type: *A. jubata* Pascoe).

Stout, oblong; antenna not much longer than body, slender; prothorax with a few tubercles on side of anterior portion; elytra sometimes with small nodes, but without tubercles; male usually with a strong spine on fore coxa and long hairs fringing sides of fore tarsus; female with last sternite grooved medially.

This genus is primarily oceanic and is found from Samoa to Madagascar, but it is almost lacking in continental Asia.

Key to Micronesian Species of Prosoplus

1. Anterior coxa of male with a distinct acute spine; body largely clothed with pubescence; not distinctly metallic........ 2

Anterior coxa of male without a spine; body largely glabrous, black tinged with greenish, bluish, or pitchy-red metallic reflections; each elytron generally with an oblique, incomplete, postmedian, ochraceous band; Palau........ **lividus**

2(1). Body without numerous distinct long erect pale hairs on dorsum; elytra rarely with a distinct, postmedian, oblique grayish-white band........ 3

Body with distinct erect pale hairs on dorsum in addition to close, mottled, tawny pubescence; each elytron with an oblique, postmedian grayish-white band; Marianas........ **bankii**

3(2). Apex of each elytron more or less rounded or rounded-truncate, not distinctly emarginate-truncate........ 4

Apex of each elytron shallowly emarginate-truncate, with outer angle distinct, though short and obtuse; elytra with many small ochraceous spots; principal thoracic spine long; Yap, Jaluit........ **xyalopus**

4(3). Prothorax about three-fifths as long as broad, not largely ridged transversely; fore tarsus of male, excluding fringe, not nearly as broad as frons........ 5

Prothorax four-fifths as long as broad, transversely rugose; fore tarsus of male, excluding fringe, nearly as broad as frons; large; thoracic tubercle small; Marshalls........ **major**

5(4). Elytra with moderate punctures and some scattered small nodes; pronotum not transversely grooved in middle of side........ 6

Elytra with large deep punctures, mostly as large as interspaces on basal half, and without nodes; pronotum strongly and subregularly punctured, with a transverse depression across middle of each side of disc; body suboblong, dull, and not distinctly spotted; Marshalls........ **hibisci**

6(5). Pronotum rather even, with flattish raised areas, lacking a distinct glabrous area on each side of base opposite middle of base of elytron 7
Pronotum uneven, with an irregularly raised area on each side of the raised center; a distinct glabrous area on each side of basal margin opposite middle of base of elytron, which is differently colored than rest of basal area 8
7(6). Middle of base of each elytron slightly paler than rest of base; coxal spine of male not much longer than thick; elytra generally with an oblique pale mark behind middle of each, rounded apically; Marianas .... **marianarum**
Middle of base of each elytron not differently colored; coxal spine of male much longer than thick; elytra generally with a dull area behind middle of each, feebly subtruncate apically; Kusaie .... **atlanticus kusaiecus**
8(6). Tooth on side of anterior margin of prothorax distinct; each elytron with a few deep punctures on apical third, ochraceous spots somewhat irregularly placed, and apex rounded; Ponape, western Marshalls .... **atlanticus atlanticus**
Tooth on side of anterior margin of prothorax indistinct; each elytron with only sparse fine punctures on apical third, ochraceous spots somewhat arranged in longitudinal stripes, and apex feebly subtruncate; central Carolines .... **atlanticus trukensis**

58. **Prosoplus bankii** (Fabr.). (Figure 18, *a*.)

Lamia bankii Fabr., 1775, Syst. Ent., 176 ("Cape of Good Hope" [East Indies]; type in British Mus.); 1787, Mant, Ins. **1**: 141; 1801, Syst. Eleuth. **2**: 301.

Lamia bancki, Fabr., 1781, Spec. Ins. **1**: 223.

Lamia Banksi, Gmelin, IN Linnaeus, 1790, Syst. Nat., ed. 13, **1** (4): 1834.

? *Acanthocinus hollandicus* Boisduval, 1835, Voy. Astrolabe, Ent. **2**: 491.

Coptops abdominalis White, 1858, Ann. Mag. Nat. Hist. III, **2**: 273.

Aegomomus insularis Pascoe, 1859, Ent. Soc. London, Trans. II, **5**: 39 (Moluccas).

Micracantha nutans Sharp, 1878, Ent. Soc. London, Trans. **1878**: 209 (Honolulu).

Prosoplus banksi, Gahan, 1893, Ent. Soc. London, Trans. **1893**: 192.—Breuning, 1940, Folia Zool. Hydrobiol., Riga **10** (1): 141.

Prosoplus bankii, Sharp, 1900, Fauna Hawaiiensis **2** (3): 114.

Prosoplus banki, Aurivillius, 1922, Coleopt. Cat. **73**: 262.

Prosoplus uchiyamai Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2): 120 (Palau; type in Hokkaido Univ.).—Ohbayashi, Tenthredo **3** (3): 227; new syn.

Male: Black to dark brown, densely clothed with various shades of dense pubescence, from blackish brown to grayish white: tawny on head, with two dark bands behind upper eye-lobe and gray dotted with blackish on gena; antenna partly subglabrous and brown, ringed or flecked with tawny near bases and with grayish white distally; prothorax mottled dark and pale brown, blackish and pale gray, elytra largely tawny gray or gray flecked with tawny, with an irregular oblique postmedian band of gray on each; ventral surfaces tawny gray flecked with darker, and with tawny fringes on posterior margins of abdominal sternites; body with scattered pale or dark suberect hairs.

Head finely punctured. *Antenna* barely longer than body. *Prothorax* with disc somewhat deeply but not very closely punctured; each side anteriorly with a low punctured

tubercle above lower prominent tubercle near smaller tubercle on anterior margin. *Elytra* sparsely and distinctly punctured, the basal punctures slightly asperate.

Female: Antenna five-sixths as long as body.

Length 7.8-11.6 mm., breadth 2.8-4.5 mm.

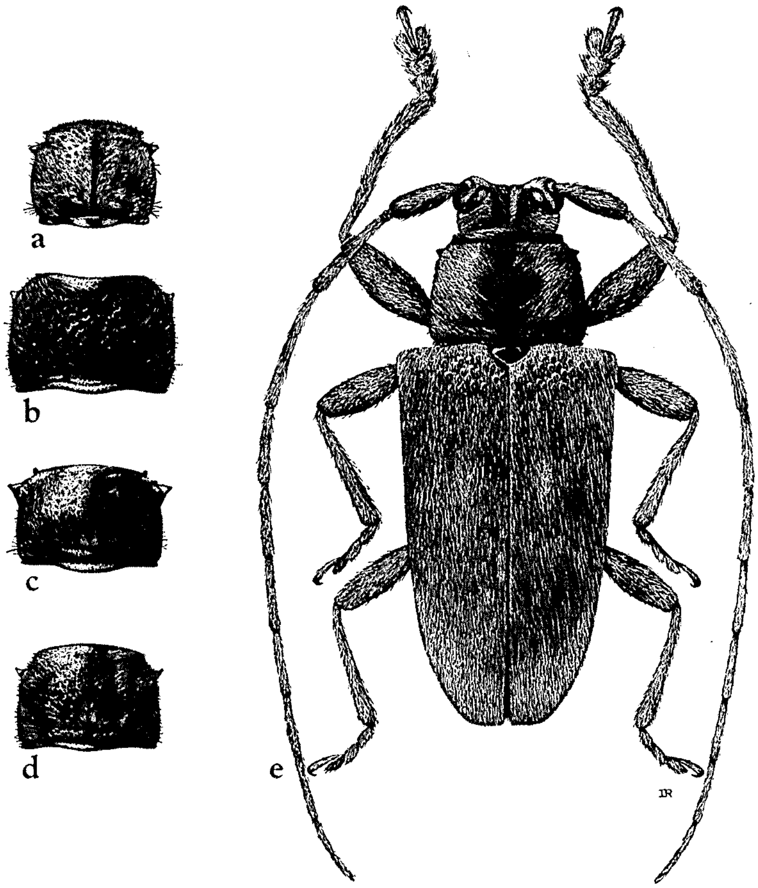


FIGURE 18.—a-d, dorsal view of prothorax: *a, Prosoplus bankii; b, P. marianarum; c, P. lividus; d, P. atlanticus atlanticus; e, P. atlanticus kusaiecus.*

DISTRIBUTION: Indonesia, Philippines, northern Australia, Marianas, Hawaiian Is.

S. MARIANA IS. SAIPAN: As Peldeto, Nov. 1941, Matusita, Oct. 1944, Webb; Fadang, As Mahetog, east of Tanapag, Chalan Kanoa, Kalabera, and hills east of Garapan, Nov. 1944 to May 1945, some on *Messerschmidia,* Dybas and Ducoff, July 1945, Hagen; Mt. Tapotchau, Feb. 1947, Susupe, Dec. 1947, Chalan Kanoa, Jan. 1949, Maehler; Mt. Tapachou, Nov. 1947,

Lange, June 1951, R. Bohart; Susupe, on beach, May 1952, Kondo. TINIAN: Mar. 1945, Hagen; Hagoya, June 1946, Oakley, Nov. 1952, Beardsley, July 1954, Davis. ROTA: July 1925, Hornbostel; Sonson (Songsong), Aug. 1940, Matusita; southern Rota, Oct. 1945, R. Bohart and Necker; Shinaparo, larvae and pupae, in *Agave,* June 1946, Townes; Sonson, Rugi, from *Leucaena,* June 1946, Oakley. GUAM: 1911, Fullaway; Sumay, Aug. 20 (AMNH), 1923, Hornbostel; Piti, Apr.-Aug. 1936, Swezey and Usinger; Dededo, Barrigada, Fonte Valley, Merizo, Yigo, Aug.-Nov. 1936, Swezey, July 1937, Oakley; Fadang, Amantes Pt., May 1945, Dybas; Pt. Oca, June 1945, G. Bohart and Gressitt, Dec. 1945, Gressitt; Agana, Dec. 1946, Krauss, Jan. 1948, Langford, March 1948, Dybas, Sept. 1953, Beardsley; Yona, Dec. 1948, Pt. Ritidian, Jan. 1949, Maehler; Mt. Lamlam, May 1949, Owen; Tutuyan, Oct. 1953, Liming.

HOSTS: *Agave sisalana* (larvae in leaf tips dying from scale insect attack), *Leucaena glauca,* and various dead trees.

Since large series are at hand from the Marianas (182 specimens) and there is none from the Palaus, it seems likely that Matsushita's type locality for *P. uchiyamai* is erroneous. I have examined the type specimen.

59. Prosoplus marianarum Aurivillius (fig. 18, *b*).

Prosoplus Marianarum Aurivillius, 1908, Deutsche Ent. Zeitschr. **1908**: 222 (Marianas; type in Riksmuseum, Stockholm).—Swezey, 1942, B. P. Bishop Mus., Bull. **172**: 170 (Guam).

Prosoplus oceanicus Ohbayashi, 1941, Tenthredo 3 (3): 226 (Saipan, Rota; type in Ohbayashi coll.); new syn.

Male: Dark reddish brown to pitchy black, largely clothed with paler pubescence; thin on head with four incomplete ochraceous stripes on occiput; antenna mottled or banded tawny and brown; prothorax thinly clothed with tawny, more grayish at side; elytra rather closely clothed with grayish buff, irregularly spotted with ochraceous, and often with an incomplete oblique ochraceous or gray band behind middle; ventral surfaces extensively mottled with ochraceous, the abdominal sternites broadly fringed behind with ochraceous hairs.

Head irregularly punctured, grooved on occiput with a ridge beside upper margin of eye. *Antenna* one-third longer than body. *Prothorax* irregularly rugose-punctate to feebly rugose or heavily punctured, a tuberculate ridge above the relatively short and blunt lateral tubercle, which is preceded by a smaller, similar tubercle on anterior margin. *Elytra* each subrounded apically and with scattered punctures, some of which are preceded by a smooth node. Length 7-14.5 mm., breadth 2.8-6 mm.

Female: Antenna one-fifth longer than body. Length 8-14 mm., breadth 2.9-5.4 mm.

DISTRIBUTION: Marianas, 170 specimens.

N. MARIANA IS. AGRIHAN: July-Aug. 1945, Borror and Holder. PAGAN: Sept. 1949, Kondo. ALAMAGAN: July 1951, R. Bohart. ANATAHAN: Aug. 1951, R. Bohart.

S. MARIANA IS. SAIPAN: Aspeldeto, Nov. 1941, Matusita; As Mahetog area, Dec. 1944, Jan. and July 1945, Dybas; Papago area, Halaihai-As Teo, Kalabera area, Sadog Talofofo, Jan.-Feb. 1945, Dybas; Magicienne Bay, Mar. 1948, Lange; Mt. Tapotchau, Feb. 1949, Maehler, July 1949, Mead and Kondo. TINIAN: July 1940, Matusita; Tinian Harbor, southeast section, central section, Mt. Lasso (northwest slope), Mar.-Apr. 1945, Dybas, Hagen and June 1946, Townes, Hadden; near Gurgan Pt., Oct. 1945, Dybas. AGIGUAN: June, July 1952, Kondo, Owen, Peterson and July-Aug. 1954, Davis. ROTA: July 1925, Hornbostel; Tatachio, Aug. 1940, Matusita; southeast part, Oct. 1945, Necker; near Sabana, June 1946, Townes; Rugi, sweeping branches of *Intsia* and other plants, June 1946, Oakley, July 1949, Kondo. GUAM: 1937, Oakley; Amantes Pt., Fadang, May 1945, Dybas, June 1946, Townes; Mt. Lamlam, Nov. 1952, Gressitt.

This species appears to comprise several races which may have been geographically isolated and recently hybridized by introductions back and forth among the Mariana Islands. Many of the individuals from Agiguan are very small, dark, and heavily punctured; and some from Agrihan are similar to these. But large, pale individuals, like those on Saipan and Tinian, have been taken in numbers on Agiguan. Some of the Rota specimens are less punctate on the pronotum, and some are bronzy, as are those from Anatahan. The type of *P. oceanicus* is apparently typical *P. marianarum* from Saipan. The scarcity of the species on Guam is puzzling.

HOSTS: Dead branches of *Intsia* and other plants, *Gossypium* (in cotton boll of herbarium specimen from Agiguan, Kondo), and *Ipomoea batatas* (pupa in sweet potato, Rota, Oakley).

60. **Prosoplus lividus** Matsushita (fig. 18, *c*).

Prosoplus lividus Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2): 120 (Palau; type in Hokkaido Univ.).

Prosoplus rugosicollis Breuning, 1940, Folia Zool. Hydrobiol., Riga **10** (1): 141 (Palau; type in Hamburg Mus.); new syn.

Male: Dark reddish brown, distinctly bronzy above; body sparsely clothed with short, adpressed pale hairs, more densely so on second and following antennal segments; a few small spots of thicker ochraceous pubescence on dorsum; one or two on each side of base of pronotum and a number in incomplete rows on each elytron, some larger ones forming an incomplete oblique band behind middle and a less distinct one at side near end of basal third; ventral surfaces irregularly, in large part sparsely, clothed, with a dense ochraceous band on posterior margin of first abdominal sternite and basal margin of second sternite.

Head subrugose-punctate on frons, smoother on occiput. *Antenna* one-fourth longer than body. *Prothorax* broad, with low nodes across central portion of disc, and anterior portion of side with a projecting serrate ridge above the large subacute tubercle, and a lesser tubercle before it on anterior margin. *Elytra* subheavily punctured, with low smooth swellings preceding basal punctures; apex of each rounded-truncate. Length 8.5-14 mm., breadth 3.5-5.5 mm.

Female: Antenna slightly longer than body. Length 8.5-14.4 mm., breadth 3.5-6 mm.

The Angaur specimens have the elytra covered with thin ochraceous-brown pubescence with a paler postmedian band, and one Koror specimen is rather heavily marked with ochraceous.

DISTRIBUTION: Western Caroline Is.; 91 specimens.

PALAU: BABELTHUAP: Gakip [Ngetkip], July 1946, Oakley; Ulimang, Dec. 1947, Dybas; east Ngatpang, 65 m., Dec. 1952, Gressitt. KOROR: July 1946, Townes, at light; Limestone Ridge, south of inlet, Nov. 1947, Feb. 1948, Dybas, Apr.-May 1949, Langford; Limestone Ridge, north of inlet, Dec. 1952, Gressitt, Oct. 1952, resting on *Calophyllum,* Beardsley. NGERGOI (Garakayo): On dead frond of native palm (probably *Gulubiopsis*), Aug. 1945, Dybas. PELELIU: East coast, July-Aug. 1945 and Jan.-Feb. 1948, Dybas, Aug. 1945, Hagen, Dorsey. ANGAUR: Oct. 1944, Ford, Feb. 1948, Dybas.

HOST: Possibly dead fronds of *Gulubiopsis* palm.

61. Prosoplus xyalopus (Karsch).

Menyllus xyalopus Karsch, 1881, Berliner Ent. Zeitschr. **25**: 11, pl. 1, fig. 17 (Jaluit; type in Zool. Mus., Berlin).

Prosoplus yapensis Aurivillius, 1908, Deutsche Ent. Zeitschr. **1908**: 223 (Yap; type in Deutsche Ent. Mus. ?).

Prosoplus xyalopus, Aurivillius, 1922, Coleopt. Cat. **73**: 264.—Breuning, 1937, Festschrift E. Strand, Riga **4**: 357 (*yapensis* a synonym).

Male: Reddish brown to pitchy black, largely clothed with pubescence: ochraceous on head, thicker along border of frons, on sides of occipital depression, and behind upper eye-lobe; thin, even, and grayish buff on antenna; tawny on pronotum, more grayish at side; grayish on elytra with about five subregular stripes or rows of ochraceous spots on each; gray on ventral surfaces with sides of hind thorax and first abdominal segment.

Head deeply and irregularly punctured; vertex with sides ridged. *Antenna* nearly one-half again as long as body; third segment much longer than scape; fourth slightly longer than third. *Prothorax* rugose-punctate, slightly swollen on middle of disc, with a swollen area on side above the very long tubercle, a small tubercle on anterior margin near latter, and another small tubercle on lower side near the long tubercle on fore coxa. *Elytra* each slightly emarginate-truncate apically and with sparse, slightly nodose punctures on disc. *Metasternum* steeply declivitous posteriorly at side. Length 9.5-16 mm., breadth 4.2-6.7 mm.

Female: Antenna one-fifth longer than body. Length 9.4-13 mm., breadth 3.5-4.8 mm.

DISTRIBUTION: Caroline and Marshall Is.

YAP. YAP: Fifteen specimens, near Yaptown, July 1946, Townes; Kolonia, Feb. 1949, Maehler; south Yap I., July 1950, Goss; Yap I., Oct. 1952, Krauss; hill behind Yaptown [Kolonia], and Mt. Matade [Madaade], Dec. 1952, Gressitt; Mt. Gillifitz (Tabiwol), 150 m., Nov. 1952, Gressitt. MAP: Oct. 1952, Krauss. GAGIL: July 1946, Oakley. TOMIL: Mar. 1949, Maehler.

CAROLINE ATOLLS. WOLEAI: One, Utegal I., Sept. 1952, Krauss.

MARSHALL IS. JALUIT: One Madyado I., Aug. 1946, Oakley.

Since this species has been found only on Jaluit in the Marshalls, it seems likely that the species evolved in Yap and was carried to Jaluit by German commerce. Jaluit and Yap were two of the four German administrative centers in Micronesia.

62. **Prosoplus atlanticus atlanticus** Breuning (fig. 18, *d*).

Prosoplus atlanticus Breuning, 1938, Festschrift E. Strand **4**: 357 (Ascension I. [Ponape]; type in Mus. Paris).

Prosoplus ponapensis Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 152, fig. 11 (Ponape; type in Bishop Mus.); new syn.

Male: Reddish brown to pitchy, clothed with varied pubescence: buff to pale ochraceous on head, mottled gray and brown on antenna, tawny to gray on pronotum, with denser tawny pubescence forming a pair of slightly curved discal stripes; gray to brown irregularly spotted with tawny to pale ochraceous on elytra and mottled gray and tawny beneath.

Head distinctly punctured on frons, distinctly ridged at side of upper eye-lobe. *Antenna* nearly one-half again as long as body. *Prothorax* irregularly rugose and nodose, swollen at center and on each side of center of disc, unevenly raised and rugose above lateral tubercle, which is fairly short and blunt and near anterior margin, which bears a feeble tubercle. *Elytra* rounded apically, irregularly punctured, with some of punctures preceded by a feeble small node.

Female: Antenna one-sixth longer than body.

Length 8.8-12.7 mm., breadth 3-4.8 mm.

DISTRIBUTION: Eastern Carolines and western Marshalls; 12 specimens.

PONAPE. Colonia, Apr., June, 1927, Uchiyama; Agric. Exper. Sta., Peipalap Pk., 300 m., June-Sept. 1950, Adams; Agric. Exper. Sta., light trap, Jan. 1953, Gressitt.

MARSHALL IS. UJELANG: Kiloken I., Feb. 1952, Fosberg; Ujelang I., Oct. 1953, Beardsley. ENIWETOK: Elugelab I., under bark of dead *Messerschmidia,* Jan. 1951, Oshiro. KWAJALEIN: Gugegwe I., Aug. 1944, Bryan; Loi I., on *Cocos,* Jan. 1945, Wallace; Enmet I., in dry leaf of *Morinda,* Apr. 1949, Maehler.

It is assumed that this species has spread from Ponape to the western Marshalls. Breuning applied the name *atlanticus,* assuming Ascension (an old name for Ponape) to refer to the island of that name in the Atlantic.

63. **Prosoplus atlanticus trukensis** Blair.

Prosoplus trukensis Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 153 (Truk; type in Bishop Mus.).

Prosoplus bimaculicollis Breuning, 1943, Folia Zool. Hydrobiol., Riga **12**: 32 (Truk; type in Hamburg Mus.); new syn.

This subspecies differs from the typical form from Ponape in having the pronotum smoother, the elytra a little less strongly punctured, less nodose, and

feebly truncate apically. This is a weak subspecies. The antenna is nearly one-half again as long as the body in the male and barely longer than the body in the female. Length 7-12.4 mm., breadth 2.8-4.9 mm.

DISTRIBUTION: Caroline Is.; 125 specimens.

CAROLINE ATOLLS. ELATO: Sept. 1952, Beardsley, Krauss. SATAWAL: Feb. 1953, Beardsley. NAMA: Mar. 1949, Langford; Oct. 1952, Beardsley.

TRUK. TON (Tol): Mt. Unibot, 200-390 m., on felled native trees, Jan., Feb. 1953, Gressitt. WENA (Moen): June 1946, Pelzen, Townes, Oakley and July 1946, Townes; Nantaku (Civ. Ad. Area), Feb.-Apr. 1949, Potts; north basin Mt. Chukumong, Feb. 1949, Potts, Mar. 1949, Maehler, Langford; Mt. Teroken, 80 m., Dec. 1952, Gressitt.

HOST: *Sorghum* (larvae and pupae in dried sorghum cane, Oakley).

64. **Prosoplus atlanticus kusaiecus** Gressitt, n. subsp. (fig. 18, *e*).

Male: Reddish pitchy, in part clothed with pale pubescence: buffy to tawny on head, sparse on each side of occipital groove; tawny brown on antenna, less even on scape and distal segments; tawny on prothorax, sparse on central portion of disc and at center of basal margin; tawny on elytra, denser in spots, and dark brown on some vague areas on disc, particularly an incomplete oblique area behind middle of each, and on a sublongitudinal line on posterior declivity, also with sparse short white hairs; ventral surfaces ochraceous tawny with small brown subglabrous areas on side and more extensively glabrous along middle of sternites.

Head strongly punctured in front, feebly so above, with distinct median occipital depression and a short ridge by upper eye-lobe. *Antenna* two-fifths again as long as body, with fourth segment slightly arched and longer than third. *Prothorax* stout, rugulose-punctate, with a slightly raised area of small tubercles above lateral tubercle, which is stout basally but not very long, and situated close to the much smaller tubercle on anterior margin; another small tubercle above the long spine on fore coxa. *Elytra* rounded apically, moderately punctured, with some feeble nodes, particularly at bases. Fore and middle femora strongly granulose. Length 13.8 mm., breadth 4.9 mm.

Female: Antenna one-sixth longer than body. Length 12.6 mm., breadth 4.7 mm.

Paratypes: Length 9.2-13 mm., breadth 3.5-5.2 mm.

Holotype, male (US 62588), Lelu [Lele] Islet, Kusaie I., 100 m., beating, Mar. 12, 1953, J. F. G. Clarke; allotype, female (US), Mutunlik, Kusaie I., 22 m., Jan. 30, 1953, Clarke. Seven paratypes, all taken by Clarke, 1953: Lele I., Mutunlik, Feb.-Apr. "Hill 541," 165 m.; near Mutunlik, Kusaie, Mar. 23; Malem River, 90 m., Apr. 27.

DISTRIBUTION: Eastern Caroline Is. (Kusaie).

This subspecies differs from *P. atlanticus* Breuning in having the frons more heavily and closely punctured, the pronotum without a distinct glabrous spot on each side of the basal margin, the basal margin of each elytron without an interruption in the basal pale band, and the elytra less conspicuously splotched with tawny.

65. **Prosoplus hibisci** Gressitt, n. sp. (fig. 19, *a-d*).

Male: Dull reddish brown, slightly darker on metasternum; moderately clothed with tawny to gray pubescence: tawny buff on head, more golden on clypeus and labrum; sparse and tawny buff on antenna; thin and tawny buff on pronotum, in part denser and more tawny, forming a vague stripe on each side of middle and a vague band close to basal margin; dull tawny buff on elytra with a denser tawny band on basal margin and a few vague incomplete stripes on posterior half of each; tawny mottled with brown on ventral surfaces and legs.

Head very shallowly concave between antennal supports, shallowly depressed on occiput, subfinely but deeply punctured on frons and occiput; inferior eye-lobe oblique, broader than deep, shallower than gena beneath it. *Antenna* one-fourth again as long as body; scape subcylindrical; third segment longer than scape; fourth slightly longer than third. *Prothorax* five-sevenths as long as broad, suboblong, convex, deeply punctured, with a smooth median line and a transverse depression on each side of disc near middle; swelling above lateral tubercle feeble; lateral tubercle short, somewhat flattened, blunt; tubercle on anterior margin of side small but distinct; spine of fore coxa long and slender. *Elytra* subparallel-sided, rounded-truncate apically, heavily punctured to beyond middle, but without nodes, finely punctured apically. Fore femur thickened but not granulose; fore tarsus slightly broadened and fringed with a few short dark hairs. Length 10.8 mm., breadth 4 mm. Paratype 9.4 mm. × 4.7 mm.

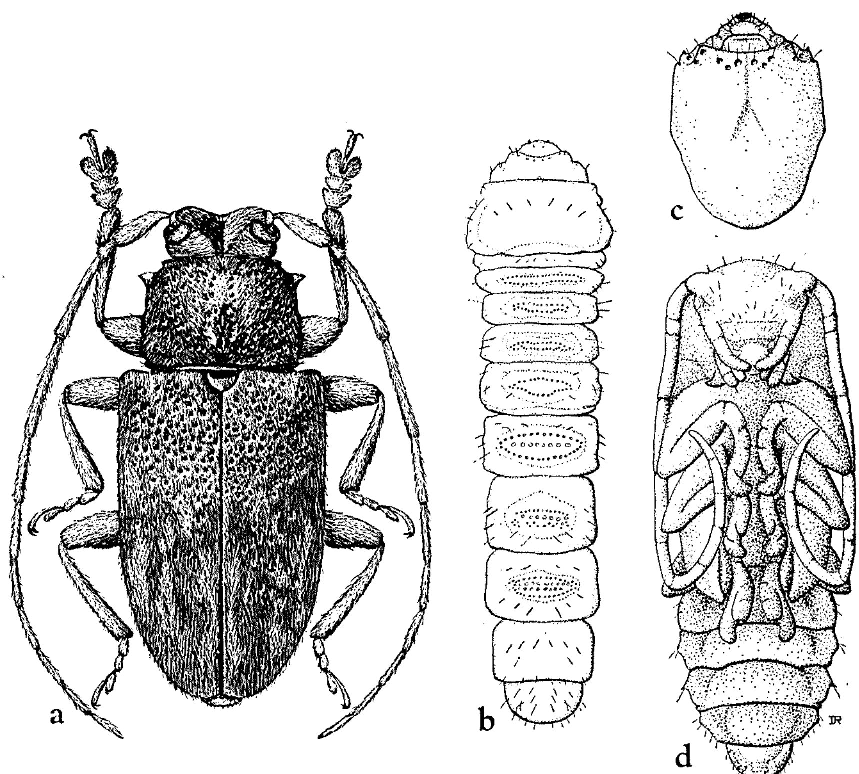


FIGURE 19.—*Prosoplus hibisci:* **a**, adult; **b**, dorsal view of larva; **c**, dorsal view of larval head capsule; **d**, ventral view of pupa.

Female: Antenna as long as body. Length 10.8 mm., breadth 4 mm.

Larva: Slender, slightly broadened and flattened at thorax. Head capsule, excluding mouthparts, six-sevenths as broad as long, subparallel in central portion, strongly constricted behind middle, rounded-truncate posteriorly; frons with four depressed bristle-insertions on each side of narrow, pigmented portion; antenna short, but on a raised basal area, with three large bristles in a vertical row behind it; mandible subacute, with cutting edge arcuately emarginate and median tooth obtuse. Pronotum smooth, not strongly pigmented, paler across middle, with a slightly sinuous transverse row of close hairs near anterior margin and a much sparser row across middle, and posterior half slightly wrinkled in a longitudinal sense. Dorsal abdominal ampulla with a double row of large adjacent nodes, fringed by smaller, less regular ones. Length 15 mm.

Pupa: Creamy white, with many very short dark bristles on dorsum and some fine pale hairs on lower part of head. Length 11 mm.

Holotype, male (US 62589), Majuro I., Majuro Atoll, Marshall Is., reared from dead wood of *Hibiscus tiliaceus,* Apr. 20, 1949, R. P. Owen; allotopotype, female (US), same data. Four paratypes (BISHOP, US): One a paratopotype; one from Namu I., Apr. 14, 1949, K. L. Maehler; one from Elluk I., Utirik Atoll, Dec. 2, 1952, F. R. Fosberg; and one from Kili I., Oct. 2, 1953, J. W. Beardsley.

DISTRIBUTION: Eastern Marshall Is.

This species differs from *P. major,* next described, in its much smaller size, stronger thoracic tubercle, and much stronger puncturation. It differs from *P. atlanticus* Breuning in its smaller size and in being more heavily punctured, less nodose on the elytra, and less rounded at the elytral apices.

66. **Prosoplus major** Gressitt, n. sp. (fig. 20).

Male: Reddish brown, pitchy on lateral border of metasternum; body clothed with rather thin buffy gray to tawny pubescence: sparse and tawny buff on head; tawny on antenna, but more buffy apically, with distal portions of apical segments reddish; sparse and buffy gray on pronotum with a tawny spot near basal angle; thin and buffy gray on elytra, vaguely mottled with some small tawny spots, and with two or three irregular dark-brown spots near apex of each; tawny spotted with brown on ventral surfaces and legs; body with very few short, suberect, pale hairs.

Head subrugose-punctate on frons, micropunctulate, wrinkled between antennal supports, broadly grooved on occiput and ridged beside upper eye-lobe; inferior eye-lobe subrhomboid, slightly broader than deep, slightly deeper than gena below it. *Antenna* one-half again as long as body, slender; scape micropunctulate, subcylindrical; third segment distinctly longer than scape; fourth slightly arched, longer than third. *Prothorax* large, four-fifths as long as broad, largely transversely ridged above, but with somewhat irregular rugosity on anteriolateral portion of disc above supratubercular swelling which is crossed by transverse wrinkles; lateral tubercle short and blunt, close to anterior margin, which bears an obsolete tubercle near it, and an obsolete tubercle on side near apex of the long, acute coxal spine. Elytra rounded-truncate apically, each with moderately strong punctures but very few nodes, and a depressed strip near side. *Ventral surfaces* sparsely and shallowly punctured, and micropunctulate. Fore femur stout, strongly granulose below; fore tarsus large, very broad, strongly fringed with auburn hairs. Length 16.8 mm., breadth 6.1 mm. Paratype 14.6 $\times$ 5.6 mm.

Female: Antenna one-seventh again as long as body; prothorax shorter, less ridged and more distinctly punctured. Length 13.2 mm., breadth 5.4 mm.

Holotype, male (US 62590), Ine Islet, Arno Atoll, Marshall Is. Aug. 7, 1950, found on *Cocos,* Ira La Rivers; allotype, female (BISHOP 2386), Jemo I., Marshall Is., at light, Dec. 18, 1952, F. R. Fosberg; paratype, male (HSPA), labeled Koror, May 26, 1950, D. Langford. It is assumed that this latter specimen is mislabeled.

DISTRIBUTION: Eastern Marshall Is.

This species differs from *P. xyalopus* (Karsch) in being larger with the prothorax more rugose and less strongly spined and with the elytra less

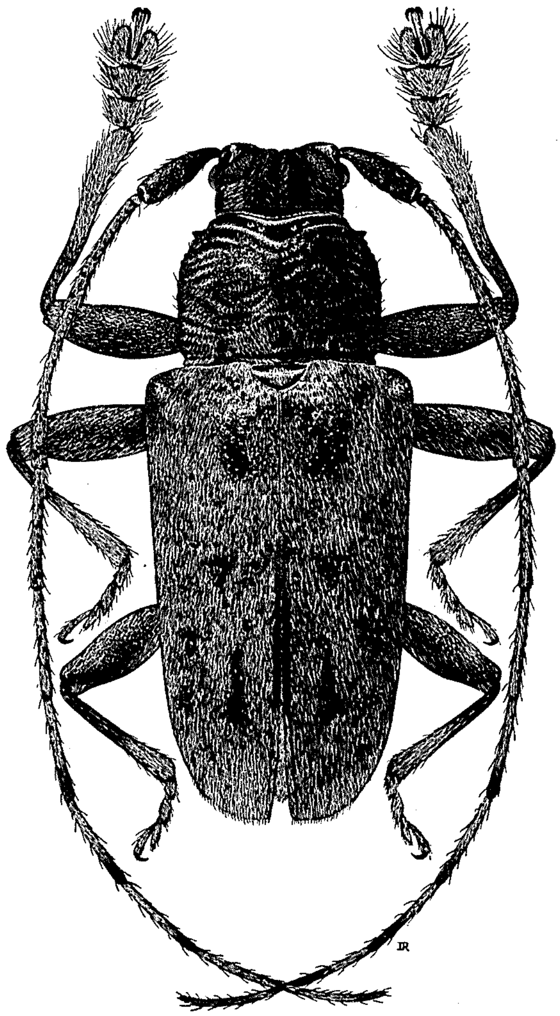


FIGURE 20.—*Prosoplus major.*

truncate and less distinctly marked. It differs from *P. atlanticus* Breuning in having the prothorax more transversely ridged, more obtusely tuberculate at side, and the elytra less evenly rounded apically, more finely punctured, less nodose, and less distinctly spotted.

TRIBE APOMECYNINI

Genus **Ropica** Pascoe

Ropica Pascoe, 1858, Ent. Soc. London, Trans. II, **4**: 247 (type: *R. piperata* Pascoe; Borneo).—Lacordaire, 1872, Gen. Col. **9**: 590.

Body tapered and declivitous posteriorly; prothorax inflated-cylindrical; elytra sometimes subcarinate, but not tuberculate; clothed with short hairs or scales.

The genus is predominantly Oriental and is not well represented on oceanic islands.

KEY TO MICRONESIAN SPECIES OF ROPICA

1. Inferior eye-lobe deeper than gena below it; body clothed with hairs above............ 2
   Inferior eye-lobe shallower than gena below it; dorsum clothed with short scales .... **squamulosa**
2. Apex of each elytron subrounded, not distinctly angulate; pronotum more swollen at basal, than at anterior, angles............ **palauana**
   Apex of each elytron oblique at suture, distinctly angulate; pronotum subequally swollen at basal and apical angles............ **yapana**

67. Ropica squamulosa Breuning (fig. 21, *a*).

Ropica squamulosa Breuning, 1938, Festschrift E. Strand, Riga **5**: 228 [Jap (Yap); type in Itzinger coll.].

Male: Dark pitchy brown varying to pale brown, generally pale on pronotum and inner portion of elytral disc; body largely clothed with small scales, in large part pale on dorsum, but denser in spots, generally forming two isolated, obliquely placed, narrow white spots anterior to apical declivity, and sparser before and behind on the same interspaces, and some other, outer interspaces, forming vague dark stripes; on elytra a distinct paler hair in each puncture; antenna indistinctly ringed with pale.

Head finely, closely and distinctly punctured; inferior eye-lobe slightly shallower than gena below it; vertex obtusely concave between antennal insertions. *Antenna* slender, one-fourth longer than body. *Prothorax* three-fourths as long as broad, moderately rounded at side; disc subevenly convex, smooth, finely punctured, slightly depressed behind center of apex. *Elytra* deeply punctured in about 15 subregular rows on each, with two fairly distinct ridges in central portion, outer one in an interspace and inner one bearing a row of punctures; apex of each obtusely subangulate.

Female: Antenna about as long as body.

Length 5.4-8.5 mm., breadth 1.35-2.45 mm.

DISTRIBUTION: Western and central Micronesia; 650 specimens.

S. MARIANA IS. SAIPAN: As Gonno, Oct. 1941, Matusita; east of Tanapag, Nov. 1944, Dybas, Jan. 1945, Hagen; Mt. Tapochau, near Garapan,

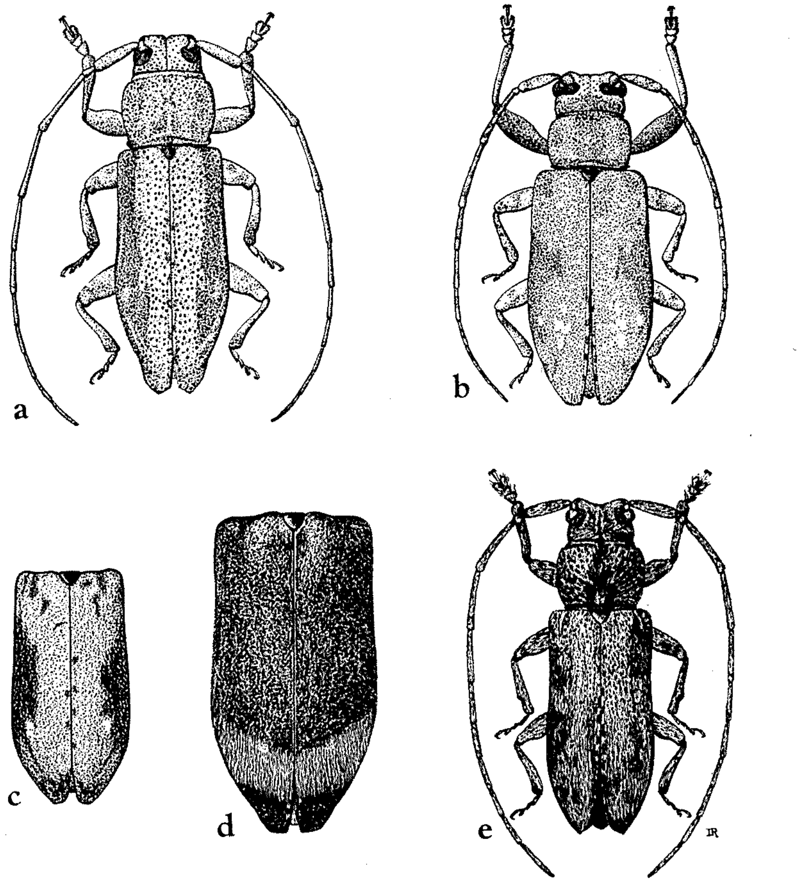


FIGURE 21.—a, *Ropica squamulosa;* b, *R. palauana;* c, d, *R. palauana,* variations in elytral pattern; e, *R. yapana.*

Papago area, Halaihai-As Teo, Laulau Bay, As Mahetog, Jan.-May 1945, Dybas; Mt. Tapochau, Feb. 1949, Maehler. TINIAN: North of Gurgan Pt., northeast of Tinian Harbor, Mt. Lasso, Apr. 1945, Dybas; Mt. Lasso, June 1946, Townes, at light, Hadden; Marpo Valley, June 1946, Oakley. AGIGUAN: May 1952, Kondo, Bronson, and Peterson; July 1954, Davis. ROTA: June 1946, Townes, June 1952, Kondo. GUAM: Piti, Mt. Tenjo, Agana, Dededo, Yigo, Mt. Alifan, Tumon, Mt. Santa Rosa, Machanao, Pt. Ritidian, on various palms, papaya, breadfruit, mango, and other plants, Apr.-Nov. 1936, Swezey and Usinger; Upi Trail, May 1936, Bryan; Pt. Oca, Pt. Ritidian, Pt. Taguan, Pago, May-July 1945, G. Bohart and Gressitt, Dec., Gressitt, many at light, on *Cycas* and other plants; Oca, Fadang, Amantes Pt., and other localities,

May-June, 1945, Dybas; Tarague Pt., June 1945, Baker; Talofofo, Haputo, North Field, and other localities, Feb.-Mar. 1948, Maehler.

PALAU. KOROR: July 1924, Uchiyama; southwest Koror, Dec. 1952, light trap, Gressitt, Mar.-Aug. 1953, Beardsley.

YAP. YAP: Kolonia, Mar. 1949, Maehler; Kolonia, southern Yap I., July-Aug. 1950, Goss; hill behind Yaptown (Kolonia), light trap, Dec. 1952, Gressitt.

CAROLINE ATOLLS. ULITHI: Mogmog I., July 1946, Townes; Potangeras I., Nov. 1947, Dybas. IFALUK: Ifaluk I., Aug. 1953, Bates.

TRUK. Nov. 1924, Uchiyama. PATA: Sabote, Apr. 1940, Yasumatsu and Yoshimura. TON (Tol): Mt. Unibot, light trap, Dec. 1952, Gressitt. WENA (Moen): Nantaku (Civ. Ad. Area), Feb.-Apr. 1949, Potts; Mt. Chukumong, Feb. 1949, Potts, Feb. 1953, Gressitt.

KUSAIE. Mutunlik, Feb. 1953, Clarke.

One specimen was taken at Sacramento, California, from an airplane from "Pacific Islands" in 1945.

HOSTS: Dead branches of various trees, including breadfruit.

68. Ropica palauana (Matsushita), n. comb. (fig. 21, *b-d*).

Pterolophia palauana Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2): 119 (Palau; type in Hokkaido Univ.).

Ropica carolinensis Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 154 (Angaur; type in Bishop Mus.); new syn.

Male: Reddish brown, in part marked with dark brown, forming varying patterns, often with a large dark spot on side of each elytron or a dark band; clothed irregularly with pale pubescence, forming additional varying patterns, often with apical declivity largely or entirely pale or with a preapical falciform pale mark or subbasal and preapical pale bands; antenna ringed with pale distally.

Head finely but not very densely punctured; inferior eye-lobe slightly deeper than gena below it. *Antenna* more than one-half again as long as body, slender, with short sparse suberect hairs on all sides. *Prothorax* nearly three-fourths as long as broad, subevenly rounded at side; pronotum finely, and in part closely, punctured, convex, but more swollen near basal angles than anterior angles. *Elytra* each rather closely and deeply, but irregularly, punctured in the equivalent of about 16 rows; disc with two or three vague raised longitudinal lines and apex obtusely rounded.

Female: Antenna slightly longer than body.

Length 4.5-8.6 mm., breadth 1.5-2.9 mm.

DISTRIBUTION: Western Caroline Is.; 74 specimens.

PALAU. BABELTHUAP: Ulimang, Dec. 1947, Dybas; Ngaremeskang, Ngaremlengui District, Iwang, Irrai District, Dec. 1952, Gressitt. KOROR: Limestone Ridge, Jan. 1948, Dybas, Dec. 1952, Gressitt, Mar., June, 1953, Beardsley. ULEBSEHEL (Aurapushekaru): Jan. 1948, Dybas. NGARMALK ("NW. Auluptagel"): Dec. 1952, Gressitt. NGERGOI (Garakayo): Aug. 1945, Dybas. PELELIU: East coast, July-Aug. 1945, Dybas, Hagen, Dorsey,

Jan. 1948, Dybas. ANGAUR: Oct. 1944, Ford, Feb. 1948, Dybas, July 1951, Gressitt.

69. **Ropica yapana** Gressitt, n. sp. (fig. 21, *e*).

Male: Reddish brown, clothed with white to dark-brown pubescence: whitish buff dotted with brown on head and pronotum, with a dark-brown stripe from occiput to base of pronotum on each side of median line; dark with pale bands on antenna; dark on scutellum; whitish buff on elytra with scattered dark-brown spots, and with two white spots on each near top of apical declivity; pale with some dark spots on ventral surfaces and legs.

Head finely, and in part somewhat closely, punctured; frons convex, subrectangular, deeper than wide; inferior eye-lobe distinctly deeper than gena below it; vertex rounded-obtuse between antennal supports. *Antenna* nearly one-half again as long as body, slender; scape slender, barely longer than sixth segment; third barely longer than fourth; fourth distinctly longer than fifth. *Prothorax* more than three-fourths as long as broad, feebly and subevenly convex at side, subevenly convex on disc, depressed at center of base and just behind center of apex, finely and irregularly punctured, grooved close to apex and base. *Elytra* twice as long as head and prothorax combined, each with fine punctures arranged roughly in about 15 rows, an indistinct ridge bearing much of fifth row; apex obtusely angulate. *Ventral surfaces* deeply punctured on side of thorax. *Legs* short and stout. Length 5.75 mm., breadth 1.6 mm.

Female: Darker brown, particularly on central portion of each elytron, with upper portion of apical declivity largely whitish and basal portion and sides of pronotum largely pale. Antenna barely as long as body, with three or four pale rings each on third and fourth segments. Length 6.2 mm., breadth 2 mm.

Paratypes: Elytra dark at sides and in center, pale on remainder or dark with a broad pale stripe along middle of each elytron, a lesser one along middle of suture, and some apical spotting. Length 5.5-6 mm., breadth 1.8-2 mm.

Holotype, male (US 62591), Kolonia (Yaptown), Yap I., Yap, Mar. 1-8, 1949, K. L. Maehler; allotype, female (US), hill behind Yaptown, 50 m., light trap, Nov. 30, 1952, Gressitt. Three paratypes (BISHOP, US): A male same data as for holotype; a female same data as for allotype, except Dec. 1; and a female, Yap I., Sept. 1952, N. L. H. Krauss.

DISTRIBUTION: Western Caroline Is. (Yap).

This species differs from *R. palauana* in having the antenna less regularly ringed distally, in having the pronotum less swollen near basal angles and less closely punctured, and in the elytra being more regularly punctured and separately angulate apically.

TRIBE PTERICOPTINI

KEY TO MICRONESIAN GENERA OF PTERICOPTINI

1. Head narrower than prothorax; elytra subparallel or narrowed posteriorly, irregularly punctured near scutellum 2
   Head nearly as broad as prothorax; elytra distinctly broadened to behind middle, regularly striate-punctate .... **Palausybra**
2. Elytra at least twice as long as head and prothorax combined; fourth antennal segment generally longer than third; antenna often longer than body .... **Sybra**
   Elytra less than twice as long as head and prothorax combined; fourth antennal segment not longer than third; antenna shorter than body .... **Oopsis**

Genus **Sybra** Pascoe

Sybra Pascoe, 1865, Ent. Soc. London, Trans. III, **3**: 141, 198 (type: *Ropica stigmatica* Pascoe; Aru).

Long, slender, suboblong; antennal supports feeble; vertex feebly concave; antenna longer or shorter than body, with fourth segment generally longer than third, and slightly arched; prothorax unarmed.

This genus is distributed from Madagascar to Fiji and Australia and is particularly well represented in Indonesia and the Papuan area.

Key to Micronesian Species of Sybra

1. Antenna about one-third longer than body in male, slightly longer than body in female; thoracic sterna of male without long erect hairs; elytral apices separately angulate, acute or obtuse........ 2
   Antenna about as long as body in male, shorter than body in female; thoracic sterna of male generally with long hairs; elytral apices blunt, rounded, emarginate-truncate or rounded-obtuse........ 5

2(1). Elytral apices each obtuse; frons wider than deep........ 3
   Elytral apices each acute; frons deeper than wide........ 4

3(2). Inner side of each elytral apex obliquely truncate; pronotum slightly raised along median line; frons with over 20 punctures on each side........ **alternans**
   Inner side of each elytral apex emarginate; pronotum slightly depressed at center; frons with about 10 punctures on side........ **catalana**

4(2). Inner side of each elytral apex emarginate; body nearly four times as long as broad; elytral interstices not distinctly convex........ **ponapensis**
   Inner side of each elytral apex obliquely truncate; body about three times as long as broad; elytral interstices distinctly convex........ **convexa**

5(1). Elytral puncturation irregular near scutellum; thoracic sterna of male with long erect hairs; prothorax broader than long; elytra without patterns........ 6
   Elytral puncturation almost entirely regular; thoracic sterna of male without long erect hairs; prothorax as long as broad, closely and finely punctured; elytra patterned........ **oreora**

6(5). Elytra truncate or emarginate apically; prothorax distinctly broader than long, with median portion of disc smooth or feebly punctured........ 7
   Elytra rounded-obtuse apically; prothorax nearly as long as broad, median portion of disc with some heavy punctures........ 8

7(6). Elytra truncate apically; prothorax subparallel-sided, disc with a broad median impunctate glabrous strip; black........ **chamorro**
   Elytra emarginate-truncate apically; prothorax rounded at side, disc feebly punctured and sparsely setose along median portion; reddish brown........ **emarginata**

8(6). Prothorax subsquarish, disc deeply punctured in center and with two transverse depressions parallel to base........ **anatahana**
   Prothorax rounded at side, disc impunctate in center, heavily punctured behind, without distinct depressions, more finely punctured anteriorly........ **consobrina**

70. Sybra alternans (Wiedemann).

Pterolophia alternans Wiedemann, 1823, Zool. Mag. II, **1**: 111 (Java).

Sybra alternans, Fullaway (and Bryant), 1922, Hawaiian Ent. Soc., Proc. **5** (1): 76.—Breuning, 1939, Festschrift E. Strand, Riga **5**: 265.—Gressitt, 1954, Hawaiian Ent. Soc., Proc. **15** (2): 274.

Sybra carolina Matsushita, 1935, Sapporo Nat. Hist. Soc., Trans. **14** (2): 121 (Palau; type in Hokkaido Univ.); new syn.

Male: Pitchy, in part reddish brown, largely clothed with smooth pubescence: grayish to tawny on head; fourth and following antennal segments whitish basally and pitchy distally; prothorax clothed with tawny gray, duller on middle of disc, and gray at side; grayish buff on elytra, with a few small white spots arranged obliquely at end of basal third and at beginning of apical third or scattered almost to apex; ventral surfaces and legs rather evenly clothed with gray.

Head deeply punctured, somewhat closely so on part of occiput; vertex shallowly concave, flat in middle; inferior eye-lobe fully twice as deep as gena below it. *Antenna* one-third longer than body, slender; third and fourth segments long, slightly arched. *Prothorax* barely broader than long, deeply and subfinely punctured. *Elytra* more than twice as long as head and prothorax combined; each obtusely angulate apically, distinctly seriate-punctate with extra punctures near scutellum.

Female: Antenna about as long as body.

Length 6.4-12 mm., breadth 1.6-3.2 mm.

DISTRIBUTION: Indonesia, Philippines, Micronesia, Hawaiian Is.; 330 specimens.

S. MARIANA IS. GUAM: 1911, Fullaway; Agana, 1920 (AMNH); 1924, Hornbostel; Pt. Ritidian, Machanao, Upi, Tarague, Dededo, Barrigada, Piti, Orote, Yigo, Mt. Tenjo, Mt. Alifan, from breadfruit and other plants, May-Aug. 1936, Usinger and Swezey; Piti, on string beans, milkweed, 1937, Oakley; Pt. Oca, Pilgo River, Pt. Amantes, Pt. Taguan, Mogfog, Pago, and other localities from cycads and other plants, May-Aug. 1945, G. Bohart and Gressitt, R. Bohart, Baker; Oca, Fadang, Pati, May-June 1945, Dybas; Mt. Alutom, Talofofo, on *Triphasia,* June 1946, Townes; Mt. Bolanos, Potts Junction, Anderson, and Northwest Field, Aug., Oct. 1952, Krauss, Feb. 1954, Liming.

PALAU. NGAIANGL: See Caroline atolls. BABELTHUAP: Ulimang, Dec. 1947, Dybas; Irrai, Apr. 1949, Langford. KOROR: Apr. 1949, Langford, Jan. and May 1953, Beardsley. ANGAUR: July 1951, Gressitt.

YAP. YAP: Hill behind Yaptown and Mt. Madaade (Matade), Dec. 1952, Gressitt. MAP: South part, July-Aug. 1950, Goss.

CAROLINE ATOLLS. TOBI I.: Sept. 1952, Krauss. NGAIANGL: Ngaiangl I., Sept. 1951, Gressitt. ULITHI: Falalop I., Oct. 1952, Krauss. SOROL I.: Oct. 1952, Krauss. WOLEAI: Woleai I., Sept. 1952, Krauss. IFALUK: Ifaluk I., Sept. 1953, Bates. ELATO: Elato I., Feb. 1953, Beardsley. LAMOTREK: Lamotrek I., Feb. 1953, Beardsley.

KUSAIE. Mutunlik, Feb. 1953, Clarke.

HOSTS: Dead branches of *Artocarpus, Barringtonia, Cycas, Triphasia,* and other plants.

71. Sybra ponapensis Blair (fig. 22, *a*).

Sybra ponapensis Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6) : 153 (Ponape; type in Bishop Mus.).

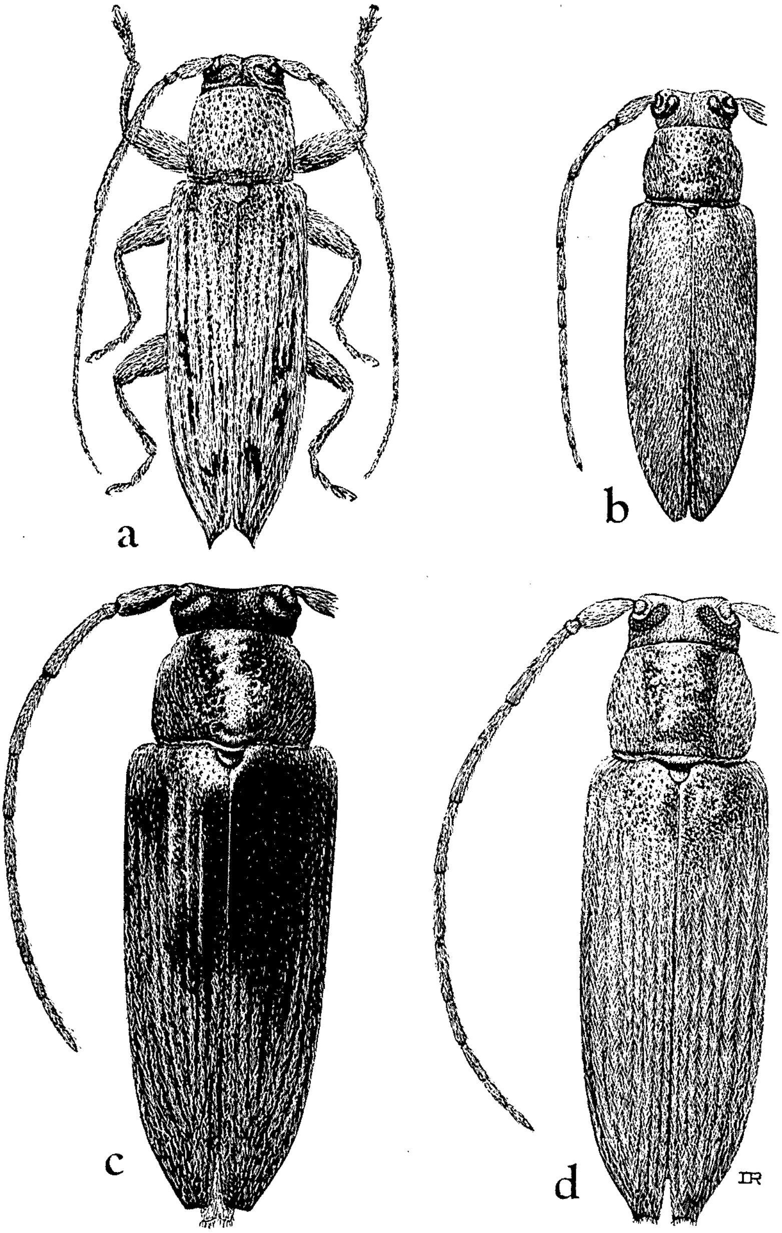


FIGURE 22.—**a**, *Sybra ponapensis;* **b**, *S. anatahana;* **c**, *S. chamorro;* **d**, *S. emarginata.*

Sybra carolinica Breuning, 1942, Folia Zool. Hydrobiol., Riga **11** (2): 146 (Carolines; type in Paris Mus.); new syn.

Male: Reddish brown, in part pitchy, clothed in part with pale pubescence: fairly thick on head, very thin on antenna and legs; dense on pronotum but darker on central portion of disc; somewhat mottled on elytra, with principal pale spot in third quarter and continuing on side to apex, an oblique pale area between humerus and middle of suture, and some irregular blackish areas, particularly at base near scutellum and on outer side of central portion, with one or two adjacent to preapical pale area; ventral surfaces rather uniformly clothed with pale.

Head deeply and somewhat finely punctured; frons narrowed above; vertex very obtusely concave; inferior eye-lobe nearly two and one-half times as deep as gena below it. *Antenna* one-third again as long as body, slender; third and fourth segments long and somewhat arched. *Prothorax* barely broader than long, deeply punctured, feebly convex at side. *Elytra* slender, more than twice as long as head and prothorax combined, each acutely produced apically, seriate-punctate with extra punctures near scutellum.

Female: Antenna barely longer than body.

Length 5.3-10 mm., breadth 1.5-2.7 mm.

DISTRIBUTION: Eastern Caroline Is.; 50 specimens.

TRUK. TON (Tol): Sabote-Epin, Pata, Apr. 1940, Yasumatsu and Yoshimura; Mt. Unibot, May 1946, Townes, Jan. 1953, 350 m., Gressitt. UTOT (Udot): May 1946, Oakley. FEFAN: May 1946, Oakley, Townes. TONOAS (Toloas): July 1939, Esaki. WENA (Moen): May 1946, Townes; Nantaku (Civ. Ad. Area), Feb.-Apr. 1949, Potts, Ross, Oct. 1952, Beardsley.

CAROLINE ATOLLS. NAMA I.: Oct. 1952, Beardsley.

PONAPE. Matalanim, Jan. 1938, Esaki; Hydroelectric Plant (Nanipil), Aug. 1946, Townes; Mt. Temwetemwensekir, light trap, Jan. 1953, Gressitt; Sokehs I., Jan. 1953, Clarke.

72. Sybra anatahana Gressitt, n. sp. (fig. 22, *b*).

Male: Dark reddish brown, pitchy on ventral surfaces, thinly clothed with tawny-buff or pale-grayish pubescence: sparse on head and antenna, denser on sides of pronotum, slightly sparser on elytra, subglabrous along basal portion of suture, and flecky whitish on posterior half; ventral surfaces with moderately dense buffy pubescence spotted with brown on metasternum and first four abdominal sternites; median portions of thoracic sterna and coxae with long erect fine hairs.

Head slightly narrower than prothorax, deeply, but not very closely, punctured; frons broader than deep, subrectangular; vertex shallowly concave; inferior eye-lobe slightly wider than deep, twice as deep as gena below it. *Antenna* very nearly as long as body; scape swollen, about as long as fifth segment; third arched, not quite as long as fourth; fifth just over one-half as long as fourth. *Prothorax* slightly broader than long, feebly convex at side, slightly narrowed apically; disc moderately convex, slightly constricted a short distance from apex and base, deeply and rather coarsely punctured, with micropuncturation in interspaces. Scutellum sparsely micropunctulate. *Elytra* nearly three times as long as head and prothorax combined; each rounded-obtuse apically, with 10 puncture-rows on disc and some extra, irregular rows basally, the punctures mostly smaller than interspaces. *Ventral surfaces* largely impunctate, with about 20 deep punctures on side of metasternum. Last abdominal sternite with a V-shaped emargination. Length 6.8 mm., breadth 1.6 mm.

Female: Antenna slightly shorter than body; thoracic sterna without long hairs; last abdominal sternite narrowly and deeply emarginate. Length 8.8 mm., breadth 2.5 mm.

Holotype, male (US 62592), Anatahan I., North Mariana Is., Aug. 26, 1951, R. M. Bohart; allotype, female (BISHOP 2387), and paratype, female (CAS), same data.

DISTRIBUTION: Northern Mariana Is. (Anatahan).

This species differs from *S. cinerascens* Breuning in being more slender and more uniformly colored and in having the pronotum more coarsely punctured and the elytra less distinctly angulate apically.

73. Sybra chamorro Gressitt, n. sp. (fig. 22, *c*).

Male: Pitchy black; elytra reddish pitchy; antenna and legs reddish brown. Body in part clothed with pale pubescence: almost lacking on head; moderate, golden buff on outer half of side of pronotal disc and side of prothorax; extremely thin on outer half of elytron, lacking along suture on basal two-thirds, fairly dense and slightly goldish on metepisternum and posterior portions of metasternum and first four abdominal sternites; sparse on antenna and legs.

Head narrower than prothorax, very sparsely punctured, finely grooved medially; frons wider than deep; vertex horizontal; inferior eye-lobe broader than deep, twice as deep as gena below it. *Antenna* slightly shorter than body; scape fusiform, about as long as sixth segment; third segment slightly shorter than fourth, arched; fifth two-thirds as long as fourth. *Prothorax* three-fourths as long as broad, slightly rounded at side, narrowed at apex; disc largely smooth along a fairly broad median strip, deeply punctured on each side of middle and rugose-punctate at side. Scutellum broad. *Elytra* three times as long as head and prothorax combined, slightly broader than prothorax; each briefly truncate apically, with angles rounded, and disc with 10 rows of moderate punctures, but with rows confused on inner half of base, with an extra row at suture. *Ventral surfaces* smooth, with a few punctures on metepisternum and about 20 on side of metasternum. Last abdominal sternite with an angulate apical emargination. *Legs* stout. Length 10.6 mm., breadth 3.1 mm.

Female: Antenna three-fourths as long as body; thoracic sterna without erect hairs; last abdominal sternite with a deep and narrow emargination. Length 9.6 mm., breadth 3.3 mm.

Paratypes: Length 7-11 mm., breadth 2-3.3 mm.

Holotype, male (US 62593), Mt. Tapotchau, Saipan I., S. Mariana Is., July 26, 1949, Y. Kondo and A. R. Mead; allotype, female (BISHOP 2388), Garapan, Sept. 15, 1941, Dengo Matusita (Matsushita), presented to Bishop Museum by Nodoka Hayashi. Thirty paratypes: One (KU), Garapan, Feb. 2, 1936, T. Esaki; one, same data as for holotype; one (US), near summit Mt. Tapotchau, July 1, 1946, H. K. Townes; 22 (CM, US, CAS, BM, BISHOP), Talofofo Ridge, Talaihai-As Teo, Kalabera area, Papago area, Saipan, Jan.-Apr. 1945, H. S. Dybas; two, Tinian I. Mar. 17, 31, 1945, Dybas, E. Hagen; one (HSPA), Mt. Lasso, Tinian I., June 16, 1946, F. C. Hadden; two, Mt. Lasso, Tinian I., June 12, 1946, Townes.

DISTRIBUTION: Southern Mariana Is. (Saipan and Tinian).

This species differs from *S. cinerascens* Breuning in being more slender and more uniformly colored; in the prothorax being more rectangular; in the disc having a conspicuous shiny, broad, median, impunctate strip; and in each elytral apex being more truncate and less angulate.

The Tinian specimens are slightly more pubescent than those from Saipan.

74. **Sybra emarginata** Gressitt, n. sp. (fig. 22, *d*).

Male: Pitchy brown, brighter reddish brown on antenna, elytra, first four abdominal segments, and legs. Body sparsely clothed with pale pubescence: fairly thin on head, denser and more golden on sides of pronotum, fairly thin and slightly uneven on elytra, denser at sides and posteriorly, dense and golden on side of metasternum and posterior two-thirds of each side of first four abdominal sternites, moderate and golden on tibiae and tarsi.

Head narrower than prothorax, deeply and closely punctured, particularly on frons; frons broader than deep, narrowed above; vertex shallowly concave; inferior eye-lobe wider than deep, twice as deep as gena below it. *Antenna* barely as long as body; scape fusiform, about as long as seventh segment; fourth slightly longer than third, both slightly arched; fifth two-thirds as long as fourth. *Prothorax* not quite four-fifths as long as broad, slightly rounded at side, narrowed at apex; disc entirely rugose-punctate, more closely punctured on each side of middle near base, and on lower part of side of prothorax. Scutellum finely punctured. *Elytra* two and two-thirds times as long as head and prothorax combined; each distinctly emarginate-truncate apically, with 10 regular rows of fine punctures, except for extra, irregular punctures near base and some punctures on interspaces. *Ventral surfaces* with fine erect hairs, largely impunctate, with about 15 moderate punctures on side of metasternum; last abdominal sternite with a moderate, obtuse emargination. *Legs* moderately stout. Length 10 mm., breadth 3 mm.

Female: Antenna slightly shorter than body; ventral surfaces without fine erect hairs; last abdominal sternite with a deep parallel-sided emargination. Length 10.5 mm., breadth 3.1 mm.

Paratypes: Length 10-12.5 mm., breadth 2.7-3.8 mm.

Holotype, male (US 62594), Guam, probably Pt. Oca, Jan. 1945, R. M. Bohart; allotype, female (CM), Pati Pt., Guam, June 4, 1945, H. S. Dybas. Seven paratypes (BISHOP, US, CM, BM): Pati Pt. and Fadang, Guam, May 31-June 4, 1945, Dybas; Agana Airport, Guam, June 13, 1946, H. K. Townes; one, Sonson (Songsong), Rota I., Aug. 6, 1940, Dengo Matusita.

DISTRIBUTION: Southern Mariana Is. (Rota and Guam).

This species differs from *S. chamorro* in being more slender, having a longer antenna, having a more punctuate frons, having a more concave vertex, having an entirely punctured pronotum, having more finely punctured elytra, and in being more extensively pubescent.

75. **Sybra consobrina** Gressitt, n. sp. (fig. 23, *a*).

Male: Pitchy brown; testaceous on tarsi; pale reddish brown on distal portions of tibiae, third antennal segment, and bases of fourth and following. Body thinly and irregularly clothed with golden-buff pubescence: sparse on head and antenna, denser on side of pronotum, somewhat irregular on elytra, with small denser or paler spots; ventral surfaces evenly clothed, with long erect hairs on pro- and mesosterna, coxae, and trochanters.

Head distinctly narrower than prothorax, deeply punctured; frons slightly broader than deep, narrowed above; vertex shallowly concave; inferior eye-lobe wider than deep, two and one-half times as deep as gena below it. *Antenna* slightly shorter than body; scape swollen, about as long as fifth segment; third as long as fourth; fifth two-thirds as long as fourth. *Prothorax* five-sixths as long as broad, distinctly rounded at side; disc evenly convex, smooth, finely and deeply punctured, more heavily so on basal half. Scutellum micropunctulate. *Elytra* two and one-half times as long as head and prothorax combined, considerably broader than prothorax; each narrowly rounded-truncate apically and with 11 rows of moderately fine punctures, with some extra punctures near scutellum. *Ventral surfaces* moderately punctured at side of thorax, with about 30 punctures on side

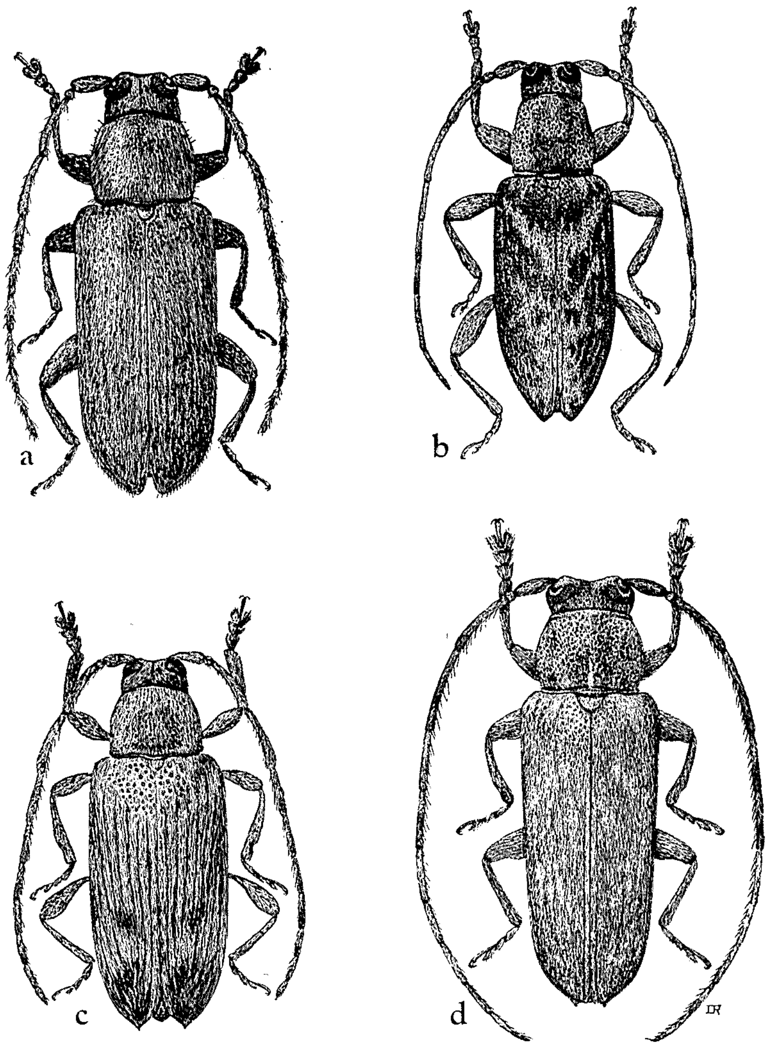


FIGURE 23.—a, *Sybra consobrina;* b, *S. oreora;* c, *S. convexa;* d, *S. catalana.*

of metasternum; last abdominal sternite entire apically. *Femora* strongly swollen. Length 10 mm., breadth 3.3 mm.

Female: Antenna nine-tenths as long as body; thoracic sterna without long erect hairs; last abdominal sternite shallowly emarginate. Length 10.6 mm., breadth 3.4 mm.

Paratypes: Length 8.6-11.3 mm., breadth 2.2-3.7 mm.

Holotype, male (US 62595), east coast, Peleliu I., Palau, Jan. 27, 1948, H. S. Dybas; allotype, female (US), same data. Nine paratypes (BISHOP, CM, US, BM); Ulimang, Babelthuap, Dec. 20, Babelthuap, Dec. 12, 1947, Dybas; Aurapushekaru (Ulebsehel) I., Jan. 14, 1948, Dybas; Ngeremediu, northeast Urukthapel (Ngurukdabel) I., 180 m., Dec. 5, 1952, Gressitt; Ngiramaous (Ngeremeyaos) I., Nov. 16, 1947, Dybas; Peleliu I., July 23, 1946, H. K. Townes.

DISTRIBUTION: Western Caroline Is. (Palau).

HOST: Adults found between leaf bases of *Pandanus* (Townes).

This species differs from *S. cinerascens* Breuning in lacking white markings; in being duller; in having the pronotum smoother, less rugose, and less densely punctured; and in having the elytra rounded instead of obliquely truncate and subacute apically.

76. **Sybra oreora** Gressitt, n. sp. (fig. 23, *b*).

Male: Reddish brown, in part marked with pitchy brown; largely clothed with tawny, whitish-buff, or brown pubescence: head reddish with moderately tawny-buff pubescence and three vague brown stripes on occiput. Antenna reddish with thin buff pubescence and apical two-thirds or so each of fifth and following segments dark brown. Prothorax brown, clothed above with pale-buff pubescence but with a broad dark-brown stripe on each side of median line and largely brownish at side. Scutellum with pale pubescence and a pair of dark-brown stripes. Elytra dark brown, each paler on humerus and darker on basal swelling and obliquely behind humerus, irregularly clothed with pale pubescence —a short whitish-buff midbasal stripe, and two small whitish spots on disc just behind middle, the inner one more anteriorly placed, and tawny buff on two oblique stripes, one starting from humerus, the other passing through inner white spot, and along sutural portion of posterior declivity and narrowly or irregularly along most of puncture-rows. Ventral surfaces rather evenly clothed with dull tawny buff. Femora pitchy on clubs and tibiae pale in middle of each.

Head nearly as broad as apex of prothorax, finely and distinctly punctured; frons fully as deep as wide, narrowed above; vertex obtusely concave between antennal supports; inferior eye-lobe about as broad as deep, one-half again as deep as gena below it. *Antenna* barely longer than body; scape strongly swollen, about as long as sixth segment; fourth segment slightly longer than third, each slightly arched; fifth two-thirds as long as fourth. *Prothorax* about as long as broad, feebly convex at side, evenly narrowed apically; disc convex, swollen in center, feebly depressed between middle and apex, subfinely and somewhat closely punctured throughout. *Elytra* slightly more than twice as long as head and prothorax combined, each rounded-obtuse apically, with ten regular rows of small punctures behind middle and 13 rows just anterior to middle and a few extra basal punctures. *Ventral surfaces* coarsely punctured on side of thorax, with about 20 punctures on side of metasternum; last abdominal sternite not emarginate apically. Length 6 mm., breadth 1.9 mm.

Female: Antenna barely as long as body; last abdominal sternite rounded-truncate. Length 5.75 mm., breadth 1.8 mm.

Paratypes: Length 3.5-5.6 mm., breadth 1.3-1.9 mm.

Holotype, male (US 62596), Limestone Ridge, south of inlet, Koror, Palau, Jan. 22, 1948, H. S. Dybas; allotype, female (US), Koror, Nov. 21, Dybas. Eight paratypes (BISHOP, US, CM, BM): Seven, Koror, Nov. 18, 1947 to Jan. 16, 1948, Dybas; one, Arakabesan [Ngerkabesang] I., next to Koror, July 19, 1946, H. K. Townes.

DISTRIBUTION: Western Caroline Is. (Palau).

This species differs from *S. pascoei* Lameere in having the inferior eye-lobe deeper and the elytra less marked with black, and it differs from *S. pascoei taiwanella* Gressitt in being larger and in lacking a common diamond-shaped black mark.

77. **Sybra convexa** Gressitt, n. sp. (fig. 23, *c*).

Male: Pitchy brown, more reddish on distal portions of abdomen and antenna, clothed with rather dense whitish to dark-brown pubescence: tawny gray on head, duller on antenna, but with distal segments grayish white basally and dark brown apically, dull tawny brown on prothorax, with a nearly complete pitchy ring on disc and slightly dark at side, dull tawny brown on elytra with a narrow oblique whitish band in basal quarter, connecting with middle of base around a dark parascutellar area, a small whitish spot just anterior to center, and a subtriangular whitish area on upper portion of apical declivity; ventral surfaces and legs tawny gray, slightly mottled with dark brown.

Head considerably narrower than prothorax, finely and deeply, but not very closely, punctured; frons as deep as wide, narrowed above; vertex somewhat deeply and obtusely concave; inferior eye-lobe about as deep as wide, fully twice as deep as gena below it. *Antenna* nearly one-half again as long as body; scape fusiform, moderately thick, barely as long as tenth segment; fourth slightly longer than second and third combined; fifth three-fourths as long as fourth. *Prothorax* five-sixths as long as broad, unevenly rounded at side; disc irregularly punctured, more closely and finely so at center. *Elytra* a little more than twice as long as head and prothorax combined, much broader than prothorax; each obliquely truncate from suture with an acute, somewhat outwardly pointing angle and 10 rows of fairly small punctures behind middle, with more anteriorly, and some dense irregular punctures near suture. *Ventral surfaces* moderately punctured on thorax, with about 25 punctures on side of metasternum; last abdominal sternite obtusely emarginate. *Femora* moderately swollen. Length 10.9 mm., breadth 3.5 mm.

Female: Antenna barely longer than body; last abdominal sternite very shallowly emarginate, medially grooved. Length 9.8 mm., breadth 3.3 mm.

Holotype, male (US 62597), Mt. Temwetemwensekir, 180 m., Ponape I., light trap, Jan. 15, 1953, Gressitt; allotype, female (BISHOP 2389), Paipalap Pk., 250 m., Sokehs I., Ponape, June-Sept., 1950, P. A. Adams.

DISTRIBUTION: Eastern Caroline Is. (Ponape).

This species differs from *S. obliquefasciata* Breuning in being more convex in lateral outline, in having the pronotum more finely punctured and the elytra with the oblique band closer to the base and narrower, and in having a large preapical pale area.

78. **Sybra catalana** Gressitt, n. sp. (fig. 23, *d*).

Male: Reddish brown, tinged with blackish on median portions of thoracic sterna, on first abdominal sternite, and on swollen portions of femora. Body moderately clothed with

tawny, grayish-white, and brown pubescence: grayish tawny on head, pale on antenna, except on distal portions of third and following segments, which are dull reddish; tawny on prothorax, slightly mottled with paler and dark brown, the latter particularly along each side of median line; tawny gray on elytra, and mottled with dull brown on sutural half particularly near middle, and with grayish white on some small spots of oblique bands before and behind middle; rather uniformly tawny grayish on ventral surfaces and legs, with posterior portion of metasternum more tawny and distal portions of tibiae goldish.

Head finely and deeply punctured; frons wider than deep, convex, medially grooved; vertex distinctly concave; inferior eye-lobe about twice as deep as gena below it. *Antenna* nearly one-third again as long as body; scape shorter than tenth segment, not very strongly swollen; fourth segment one-third longer than third; fifth and following each much shorter than third. *Prothorax* three-fourths as long as broad, subevenly rounded at side, only slightly constricted very near apex and base; disc subevenly convex, slightly depressed behind middle and at each side of median portion between middle and apex, deeply and somewhat closely punctured. *Elytra* parallel-sided, two and two-thirds times as long as head and prothorax combined; each narrowly emarginate-truncate apically, with outer angle more prominent than sutural angle; disc with 12 subregular rows of punctures behind middle and more rows anteriorly, with some confused punctures near scutellum and a few extra punctures elsewhere between rows. *Ventral surfaces* deeply punctured along side, with at least 30 punctures on side of metasternum. *Legs* moderately stout. Length 10.7 mm., breadth 3.5 mm.

Female: Antenna slightly shorter than body. Length 13 mm., breadth 4.15 mm.

Paratypes: Males 10-11.6 × 2.9-3.8 mm., females 11-12.4 × 3.1-3.6 mm.

Holotype, male (BISHOP 2390), Tarawa Atoll, Gilbert Is., Mar. 1951, R. Catala; allotype, female (BISHOP), same data; five paratypes (US, BM, BISHOP, Australian Mus.); four paratopotypes, July-Aug. 1951, Catala, and one, Apemama Atoll, Gilbert Is., May 25-30, 1944, J. W. Enke.

DISTRIBUTION: Gilbert Is.

This species differs from *S. catopa* Dillon and Dillon in having the vertex more concave, the pronotal puncturation coarser on each side of middle, the elytral apex emarginate instead of simply angulate, and the elytral punctuation deeper and in depressed rows.

Genus **Oopsis** Fairmaire

Oopsis Fairmaire, 1850, Revue Zool. II, 2: 115 (type: *O. nutator* Fairmaire; Tahiti).

Body short, stout; elytra acute apically, or at least obliquely truncate; antenna shorter than body, with third and fourth segments subequal.

This genus is primarily Polynesian and Fijian, but it extends to the New Hebrides and New Caledonia.

79. **Oopsis marshallensis** Gressitt, n. sp. (fig. 24, *a*).

Male: Reddish brown, tinged with pitchy, particularly on metasternum and femora. Moderately clothed with pale-gray to dark-brown pubescence: thin, fairly even, and silvery buff on head, grayish white on bases of antennal segments, moderately close and silvery buff varied slightly with dark brown on prothorax, dark brown on elytra with a

vague broad pale band on basal third and another on apical two-fifths, each consisting of incomplete pale longitudinal lines corresponding with inter-punctural rows; ventral surfaces thinly and evenly clothed with pale gray, more yellowish on tibiae and tarsi.

Head deeply and not very closely punctured; frons convex; vertex very shallowly concave; postocciput impunctate; inferior eye-lobe twice as deep as gena below it. *Antenna* nearly as long as body; scape fusiform-cylindrical, a little longer than fifth segment; third segment very slightly longer than fourth, each slightly arched; fifth to last decreasing in length. *Prothorax* five-sixths as long as broad, slightly and evenly swollen at side, feebly convex above, with deep irregular punctures of varying density. *Elytra* two and one-fifth times as long as head and prothorax combined, narrowed and separately acute apically; each with 11 rows of punctures at middle, but with extra punctures on basal portion near suture and margin and on extreme base, forming irregularly punctured areas. *Ventral surfaces* smooth except for deep punctures on side of thorax. *Femora* stout. Length 8.2 mm., breadth 3.2 mm.

Female: Antenna four-fifths as long as body. Length 7.9 mm., breadth 3 mm.

Paratypes: Length 7-9.6 mm., breadth 2.8-4 mm.

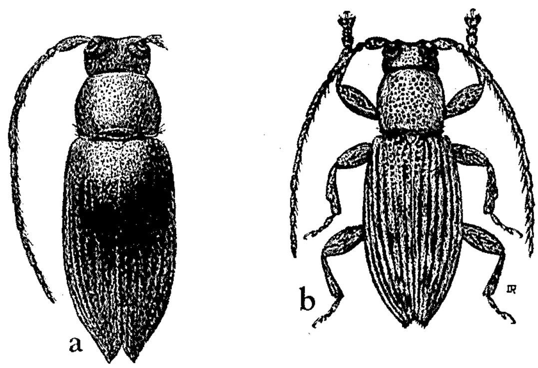


FIGURE 24.—**a**, *Oopsis marshallensis;* **b**, *Palausybra vestigialis.*

Holotype, male (US 62598), Medyado I., Jaluit Atoll, Marshall Is., Aug. 24, 1946, R. G. Oakley; allotype, female (US), Imrodj I., Jaluit, Aug. 28, 1946, H. K. Townes. Fourteen paratypes (US, BISHOP, CAS, CM, BM): Five paratopotypes, Oakley and Townes; one, Bigatyelang I., Ailinglapalap Atoll, Aug. 25, 1946, Oakley; one Woja (Wotje) I., Ailinglapalap, Oct. 26, 1953, J. W. Beardsley; one, Namorik I., Namorik Atoll, Sept. 30, 1953, Beardsley; three, Majuro I., Majuro Atoll, June 26, 1950, R. L. Usinger and one, Oct. 8, 1953, Beardsley; one Ine I., Arno Atoll, Aug. 4, 1950, Ira La Rivers and one, Arno I., Arno Atoll, Oct. 4, 1953, Beardsley.

DISTRIBUTION: Marshall Is.

This species differs from *Oopsis nutator* (Fabr.) in averaging slightly larger in size; in being more uniformly colored, particularly on pronotum, which is without pale marks; and in having the pronotum more finely and closely punctured and each elytral apex less acute, with the inner oblique edge less straight. It differs from *O. brunneocaudatus* Fairmaire, to which it is

closely allied, in having the elytra entirely pale apically, the pronotum more heavily and completely punctured, and each elytral apex less transversely truncate and more rounded at tip. It differs from *O. albolineata* Breuning in having each elytral apex non-emarginate and the sutural angle untoothed.

Genus **Palausybra** Gressitt, new genus

Body broadest at middle of elytra; prothorax nearly as broad as elytral bases; elytra separately angulate apically. Head convex in front, concave at vertex, deeply punctured, with inferior eye-lobe barely as deep as gena below it; third antennal segment hardly longer than fourth; prothorax subcylindrical, about as broad as long; metathorax barely longer than first abdominal segment.

Type: *Palausybra vestigialis,* new species.

Range: Palau Islands.

This genus differs from *Sybroides* Dillon and Dillon in having the elytra shortened, narrower at the humeri than in the middle, and barely broader than the prothorax, with the prothorax more cylindrical and the metathorax much shorter. It differs from *Sybra* Pascoe in the same characters and in that the fourth antennal segment is not longer than the third.

80. Palausybra vestigialis Gressitt, n. sp. (fig. 24, *b*).

Female: Pitchy brown, irregularly tinged with reddish brown, particularly on tibiae, tarsi, and basal portions of antennal segments. Surfaces irregularly clothed with pale grayish pubescence: thin on head and prothorax, paler on basal portions of antennal segments, uneven on elytra, for most part forming irregularly broken longitudinal pale stripes on interspaces, thin and even on ventral surfaces and legs.

Head deeply and not very closely punctured; frons convex, squarish; vertex shallowly and evenly concave between antennal insertions; inferior eye-lobe rounded-triangular, about as deep as gena below it. *Antenna* six-sevenths as long as body; scape swollen, thickest in middle, barely longer than fifth segment; third very slightly longer than fourth. *Prothorax* practically as long as broad, very slightly thickened in middle; disc feebly and subevenly convex, deeply and closely punctured. Scutellum small, narrowed posteriorly. *Elytra* twice as long as head and prothorax combined, not much broader basally than prothorax, widened to middle, evenly narrowed and separately angulate apically; disc of each with 10 regular rows of deep punctures, a short extra sutural row on basal fifth, and some of median rows fusing near base and apex. Hind wing vestigial. *Ventral surfaces* smooth, but with sides of thorax deeply punctured; metasternum hardly longer than first abdominal segment. *Legs* fairly short; hind femur moderately swollen, just over one-half as long as abdomen. Length 4.9 mm., breadth 1.65 mm.

Male: Antenna nearly as long as body; frons sparsely punctured; each elytron with extra sutural puncture-row nearly obsolete. Length 4 mm., breadth 1.45 mm.

Paratypes: Length 5.6 mm., breadth 2 mm.

Holotype, female (US 62599), Ngiwal, Babelthuap I., Palau, Apr. 22-23, 1953, J. W. Beardsley; allotype, male (CAS), Peleliu I., July 28, 1945, E. Hagen. Two paratypes, females (BISHOP, CM): Peleliu I., July 28, 1945, H. S. Dybas; Ulimang, Babelthuap I., Dec. 11, 1947, Dybas.

DISTRIBUTION: Western Caroline Is. (Palau).

This species differs from species of *Sybra* and *Sybroides* in having the elytra short, narrowed basally and widest in the middle, and in having the metathorax quite short.

Tribe ACANTHOCININI

Key to Micronesian Genera of Acanthocinini

1. Body lacking both long erect hairs and bristles 2
   Body with both long erect hairs and bristles; prothorax broadened in middle and with a slender tooth pointing more or less backward .... **Exocentrus**

2(1). Antennal scape not reaching middle of prothorax; body length less than 8 mm. 3
   Antennal scape exceeding middle of prothorax; body length more than 9 mm.; body broad .... **Paratrypaneus**

3(2). Prothorax toothed laterally 4
   Prothorax unarmed laterally 5

4(3). Prothorax transverse, enlarged in middle and toothed near base .... **Sciadella**
   Prothorax nearly as long as broad, subcylindrical, briefly toothed behind middle .... **Nonymoides**

5(3). Antenna very slender; scape subfusiform; prothorax feebly thickened in middle; elytra broadest behind middle .... **Paremeopedus**
   Antenna not very slender; scape cylindrical; prothorax strongly thickened at middle, subhexagonal; elytra widest at middle .... **Boninella**

Genus **Paratrypanius** Aurivillius

Paratrypanius Aurivillius, 1908, Deutsche Ent. Zeitschr. **1908**: 223 (type: *P. flavovittatus* Aurivillius; Samoa).

Body stout; scape long and slender; prothorax with a stout tooth at side; surfaces without long erect bristles and hairs.

Aurivillius suspected this genus of being of Neotropical origin. Previously, it has been known only from Samoa.

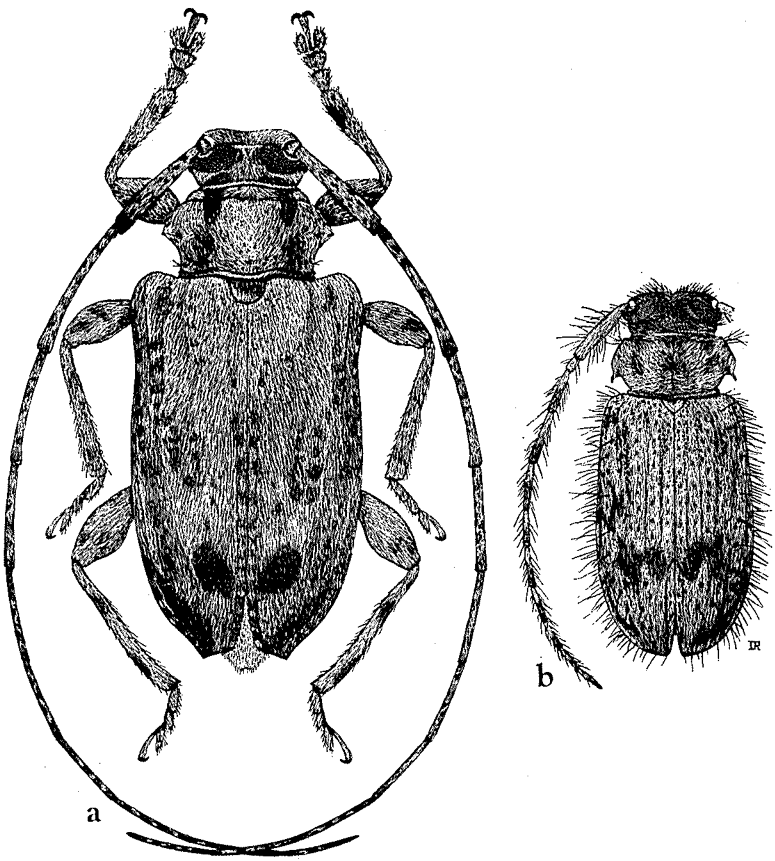
81. **Paratrypanius intricatus** Gressitt, n. sp. (fig. 25, *a*).

Female: Reddish brown, in part marked with darker brown, thinly clothed with whitish to brown pubescence: head reddish with dense whitish pubescence behind eye and with grayish spotted with brown on remainder; antenna reddish, irregularly ringed with whitish-buff pubescence; prothorax reddish with some dark-brown spots on each side of disc and anterior to lateral tubercle, and thin grayish-white pubescence except on brown areas; scutellum clothed with brownish at sides and whitish along middle; elytra reddish, each with five or six incomplete rows of small brown spots, a much larger one beside suture on apical declivity and a smaller one on margin close to apex, besides thin grayish-white pubescence of varying density; ventral surfaces reddish with silvery-white pubescence; legs reddish brown with brown spots and some whitish pubescence.

Head minutely punctured, shallowly concave between antennal supports; frons as deep as wide, finely grooved medially; inferior eye-lobe nearly as broad as deep, three times as deep as gena below it. *Antenna* nearly twice as long as body, slender; scape slender, nearly as long as third segment; third and following gradually decreasing in length. *Prothorax* twice as broad as long, slightly wider just behind apex than at base;

side with a stout acute tubercle just behind middle; disc smooth, punctured only near apex and base, and with five low rounded swellings, two anterior and three posterior. Scutellum rounded-trapeziform. *Elytra* broad and uneven; each obtuse apically, vertical at side, with irregular moderate punctures, more nearly arranged in rows external to middle, with some of rows edged internally with ridges basally and some of punctures distinct to apex. *Ventral surfaces* micropunctulate. *Hind femur* rather slender. Length 9.7 mm., breadth 4.5 mm.

Paratypes: Markings agree well with type; pronotum in some almost appears to have an interrupted blackish stripe on each side. Length 11.5-13 mm., breadth 5.4-5.8 mm.



a

b

FIGURE 25.—a, *Paratrypanius intricatus;* b, *Exocentrus ciliatissimus.*

Holotype, female (BISHOP 2391), Agric. Exper. Sta., near Colonia, Ponape, Jan. 13, 1928, S. Uchiyama. Four paratypes, females (US, CAS, KU, Hokkaido Univ.): Koroni (Colonia), Feb. 21, 1930, May 31, 1932, Uchiyama; Agric. Exper. Sta., June-Sept. 1950, P. A. Adams; Mt. Temwetemwensekir, 180 m., Jan. 17, 1953, Gressitt.

DISTRIBUTION: Eastern Caroline Is. (Ponape).

This species differs from *P. savaiiensis* Aurivillius in having more mottled markings, a more acute prothoracic tubercle, and each elytron more angulate apically and less evenly contoured and more heavily punctured on disc.

Genus **Exocentrus** Mulsant

Exocentrus Mulsant, 1839, Col. France Long., 152 (type: *E. punctipennis* Mulsant and Guillebeau; Europe).

Oligopsis Thomson, 1864, Syst. Ceramb., 111, 596 (type: *O. exocentroides* Thomson; Ceylon).

This genus is characterized by a broad, depressed body, laterally angulate and finely toothed prothorax, and long erect body bristles. It is widely distributed, but it is particularly rich in the Oriental and Ethiopian Regions and rare in Australia and the Pacific.

82. **Exocentrus ciliatissimus** Gressitt, n. sp. (fig. 25, *b*).

Female: Reddish brown to pitchy, largely clothed with grayish-white pubescence and very long white hairs in addition to black bristles: head pitchy black, pale on labrum, with irregular whitish pubescence, duller above, long buffy-white hairs, and a row of black bristles on each side of vertex; antenna reddish brown, pitchy toward apices of segments, with white pubescence at bases of segments and with long white to black suberect hairs; prothorax reddish brown, densely clothed with buffy or tawny-white pubescence, which is thinner and brownish at center and middle of each half of disc, with a few dark discal bristles and a few long, erect, white hairs at side; elytra reddish brown mixed with pitchy, clothed with white pubescence except for irregular basal and postmedian areas of thin brownish pubescence, each with six rows of erect black discal bristles and two lateral rows of longer erect white hairs, the marginal row densest; ventral surfaces reddish brown with dense whitish pubescence, and a few erect white hairs near sides; legs reddish with white pubescence and long erect white hairs.

Head finely granulose, with scattered punctures; frons nearly twice as broad as deep; vertex shallowly concave; inferior eye-lobe nearly as wide as deep, three times as deep as gena below it. *Antenna* one-fourth longer than body; scape longer than second and third segments combined; third to fifth subequal; following gradually shorter. *Prothorax* practically twice as broad as long; side strongly convex, widest just behind middle, behind which is a fairly slender spine pointing almost backward and somewhat upward; disc finely punctured, smooth, with median line slightly raised. Scutellum rounded triangular. *Elytra* less than twice as long as broad, broader than prothorax; disc of each with six distinct widely spaced puncture-rows, which are in part double or multiple with the punctures fairly close, and a row of widely spaced bristle-insertions between each two puncture-rows. *Ventral surfaces* smooth, finely punctured. *Femora* stout. Length 6.2 mm., breadth 2.6 mm.

Male: Antenna one-third longer than body. Length 4.2 mm., breadth 1.6 mm.

Holotype, female (US 62600), Koror, Palau Is., at light, Apr. 1954, J. W. Beardsley; allotopotype, male (BISHOP 2392), Sept. 1952, N. L. H. Krauss.

DISTRIBUTION: Western Caroline Is. (Palau).

This species differs from *E. echimys* Pascoe in being larger, in having denser and more whitish pubescence, and in having conspicuous long white hairs around the borders of the body and on the legs.

Genus **Sciadella** Aurivillius

Sciadella Aurivillius, 1913, Akad. Wiss. Wien, Math.-Nat. Kl., Denkschr. **89**: 693 (type: *S. variabilis* Aurivillius; Samoa).

Moala Dillon and Dillon, 1952, B. P. Bishop Mus., Bull. **206**: 100 (type: *M. crassus* Dillon and Dillon; Fiji); new syn.

Vitilevua Dillon and Dillon, 1952, B. P. Bishop Mus., Bull. **206**: 102 (type: *V. viridescens* Dillon and Dillon; Fiji); subgenus.

Neosciadella Dillon and Dillon, 1952, B. P. Bishop Mus., Bull. **206**: 105 (type: *N. inflexa* Dillon and Dillon; Fiji); subgenus.

Body rather flat to fairly convex above, more or less parallel-sided; head slightly concave between antennal insertions; inferior eye-lobe about as wide as deep, deeper than gena below it; antenna slender, generally a little longer than body; scape long, but shorter than third segment; third and fourth subequal, each about twice as long as fifth; prothorax transverse, toothed at side behind middle; elytra carinate to rounded at side; ventral surfaces with or without long erect hairs.

This genus was hitherto recorded only from Samoa. With the above synonymy and the changes recorded under *Nonymoides,* the present known range of the genus includes Samoa, Fiji, the Carolines, the Marianas, the Bonins, and Botel-Tobago. Very closely related material is at hand from New Guinea, which may be the ancestral home of the group. Considerable diversity of form is demonstrated by the Micronesian representatives, but intermediate stages of characters are represented among the following species and subgenera.

Key to Micronesian Species of Sciadella

1. Ventral surfaces with long flying hairs, particularly on legs; body more or less flat above, side of each elytron carinate or vertical, or both 2

Ventral surfaces and legs generally without erect hairs; body more or less convex above; side of each elytron not carinate and rarely vertical; antennal fringe generally of a single row of small bristles in male (subgenus *Micronesiella*) 8

2(1). Male with a tall compressed spine on each elytral disc; each elytron narrow apically and more or less vertical at side; antennal fringe generally of a single row of small bristles in male (subgenus *Acanthosciades*) 3

Male without a long spine on each elytron; each elytron fairly broad apically and vertical at side and sometimes also carinate; antennal fringe generally of fine hairs in more than a single row in male (*Sciadella s. str.*) 4

3(2). Male with discal elytral spine long and slender; inferior eye-lobe only slightly deeper than gena; Kusaie .... **latior**

Male with discal elytral spine compound, often nearly as deep as long, and often with two or more points; inferior eye-lobe one-half again as deep as gena; Truk and Ponape .... **latispina**

4(2). Pronotal puncturation moderately fine, about 20 punctures in an approximate row along median line 5
Pronotal puncturation exceedingly fine and close, about 25 punctures in an approximate row along median line; Mariana Is .... **meridiana**

5(4). Each elytron with equivalent of eight to 10 puncture-rows on inner half at middle 6
Each elytron with equivalent of about 12 puncture-rows on inner half at middle; dorsum largely reddish; femora brown basally; Bonin Is .... **bioculata**

6(5). Each elytron with equivalent of about eight puncture-rows on inner half at middle 7
Each elytron with equivalent of about nine or 10 puncture-rows on inner half at middle; dorsum largely pale, with a little dark mottling; femora testaceous except for a dark ring on club; Iwo Jima .... **iwojimana**

7(6). Prothorax narrower at apex than at base; thoracic pleura with silvery pubescence; elytra feebly swollen near scutellum; dorsum largely pitchy; Truk .... **argentipleura**
Prothorax broader at apex than at base; thoracic pleura with goldish pubescence; elytra strongly swollen near scutellum; dorsum largely pale; Yap, atolls .... **aureopleura**

8(1). Elytra without a fringe of erect hairs; femora without erect hairs 9
Elytra with a fringe of erect hairs; femora with erect hairs; side of thorax and elytra with indistinct greenish pubescence; antenna pale; elytra with dark and pale stripes and spots; Ponape .... **townesi**

9(8). Pronotum rarely strongly convex, without dense greenish-golden pubescence 10
Pronotum rather strongly convex, clothed with greenish-golden pubescence except on central portion of disc; elytra spotted with dark brown and tawny, sometimes a dark-brown band behind middle; antenna reddish brown with fairly long fringe; Truk .... **esakii**

10(9). Prothorax distinctly broader than long 11
Prothorax nearly as long as broad; elytra parallel-sided, broadly rounded apically, mottled with brown and gray; Palau .... **subcylindrica**

11(10). Elytra more than twice as long as broad and generally more than three times as long as prothorax 12
Elytra less than twice as long as broad and generally less than three times as long as prothorax 13

12(11). Body reddish; appendages pale; prothorax with a feeble tooth, elytra slightly broadened postmedially; Agrihan .... **boharti**
Body largely dark; appendages brown; prothorax with a fairly strong tooth; elytra parallel-sided; Palau .... **palauicola**

13(11). Elytra about three times as long as prothorax, narrowed posteriorly; body about three times as long as broad 14
Elytra less than three times as long as prothorax, subparallel or slightly broadened behind middle; body much less than three times as long as broad 15

14(13). Appendages testaceous; body with golden-buff or bluish pubescence, with or without a few black marks on elytra; prothoracic spine nearly as long as second antennal segment; Ponape .... **versicolor**
Appendages brown; body with small brown and buff spots; prothoracic spine distinctly shorter than second antennal segment; Yap .... **attenuata**

15(13). Body convex, generally less than 3.5 mm. in length; elytra generally slightly broadened behind middle, often with many small spots of dark and pale pubescence 16
Body fairly flat above, generally more than 3.5 mm. in length; elytra subparallel-sided in basal two-thirds, generally fawn colored with sometimes a few vague dark or pale areas; Caroline Atolls .... **atollorum**

16(15). Elytra broadened to behind middle, broadly rounded apically; some of pronotal punctures as widely separated as their diameters; Yap........**saltator**
Elytra feebly broadened posteriorly, distinctly narrowed apically; pronotal punctures extremely dense; Mariana Is..**mariana**

Subgenus **Acanthosciades** Gressitt, new subgenus

Vertex slightly concave; inferior eye-lobe transverse, deeper than gena; antenna slender, with third and fourth segments very long; prothorax obtuse at side and briefly toothed; elytra quite narrow apically, each vertical at side and with a long erect compressed spine at end of basal third; femora strongly swollen and quite hairy.

Type: *Nonymoides latior* Blair.

Range: Eastern Caroline Islands.

This subgenus differs from typical *Sciadella* Aurivillius in having a conspicuous erect compressed spine on each elytral disc in the male. The elytra are also less distinctly carinate, the body is less hairy, and the prothorax is more briefly toothed and more obtuse at side.

83. Sciadella (Acanthosciades) latior (Blair), n. comb. (fig. 26, *a*).

Nonymoides latior Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 156 (Kusaie; type in Bishop Mus.).

Male: Reddish brown to pitchy black, clothed with tawny-buff to grayish-white pubescence; head pitchy, thinly clothed with buffy; antenna reddish, darker distally, with sparsely pale pubescence and a few short oblique pale hairs, with moderately short oblique dark bristles beneath; prothorax pitchy, reddish near borders, thinly clothed with tawny pubescence with a few vague dark-brown spots; elytra reddish, rather evenly and closely clothed with tawny buff pubescence, with a few scattered small brown transverse spots on interspaces; ventral surfaces largely pitchy, partly reddish at side, with grayish-white pubescence, which is denser at side; legs dark brown; femora testaceous basally and blackish on clubs.

Head broader than apex of prothorax, deeply and closely punctured; frons nearly twice as wide as deep; vertex slightly concave; inferior eye-lobe wider than deep, slightly deeper than gena below it. *Antenna* two-thirds again as long as body, slender, scape slightly thickened just beyond middle, just over one-half as long as third segment; fourth five-sixths as long as third, twice as long as fifth. *Prothorax* three-fourths as long as broad, somewhat obtusely convex behind middle of side, with a very short acute tooth at angle; disc rather closely and deeply punctured. *Elytra* subparallel in basal half, narrowed and rounded apically; each closely and irregularly punctured on inner portion of disc and on lateral declivity, regularly punctured in five rows just behind middle, a strong, laterally compressed spine, nearly as long as prothorax, at end of basal third, the spine tapering, acuminate, and bent slightly inward. *Ventral surfaces* moderately punctured at side. *Femora* stout; tarsi slender. Length 5.5-7 mm., breadth 1.8-2.6 mm.

Female: Antenna one-third longer than body; elytral spine lacking. Length 3.6-6.8 mm., breadth 1.3-2.5 mm.

Allotype, male (US 62602), Malem River, at alt. 90 m., in light trap, Apr. 27, 1955, J. F. G. Clarke. Specimens of both sexes (BISHOP, US, CM, BM, CAS, KU, AMNH).

DISTRIBUTION: Eastern Caroline Is.; 152 specimens.

KUSAIE. Lelo, or Lelu [Lele], I., Dec. 1937, Esaki; Mt. Tafeayat, Aug. 1946, Townes; Lele I., Mt. Matante, "Hill 1010," Funaunpes, Tafunsak, "Hill 541," Malem River, Mwot, Pukusrik, Jan.-Apr. 1953, Clarke, Mutanlik, Jan. 1953, Clarke and Gressitt. Males were more commonly taken by beating branches and females were more commonly taken in light traps.

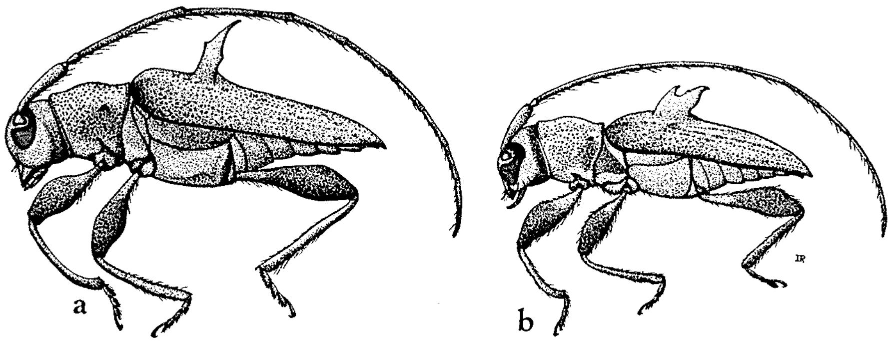


FIGURE 26.—**a**, *Sciadella* (*Acanthosciades*) *latior*; **b**, *S.* (*A.*) *latispina*.

PONAPE. Three specimens from Sokehs (Jokaj) I., Ponape, Jan. 10, 1954, Clarke, appear identical with those from Kusaie. Possibly the species was introduced from Kusaie.

84. **Sciadella (Acanthosciades) latispina** Gressitt, n. sp. (fig. 26, *b*).

Male: Pale brown to reddish pitchy, clothed in part with buffy to whitish pubescence; head reddish brown, pitchy on lower frons, with fairly dense tawny-buff pubescence; antenna ochraceous with reddish scape and very sparse pubescence and fairly short dark oblique hairs beneath; prothorax dark reddish brown, paler at base and apex, with fairly close tawny-buff pubescence, with four vague longitudinal discal dull stripes; elytra pale brown, slightly reddish on borders, moderately clothed with buff pubescence marked with many small brown spots; ventral surfaces dark reddish brown, with fairly dense golden-buff pubescence at sides; legs pale with femoral clubs darker and with pale pubescence and erect pale hairs.

Head nearly as broad as prothorax, subfinely but distinctly punctured; frons nearly twice as wide as deep; vertex very shallowly concave; inferior eye-lobe about as broad as deep, one-half again as deep as gena below it. *Antenna* one-half again as long as body, slender; scape feebly thickened just beyond middle; third segment nearly twice as long as scape, slightly longer than fourth and two and one-half times as long as fifth. *Prothorax* two-thirds as long as broad, sinuately convex at side, widest just behind middle, except for lateral tooth which is acute and located half way between middle and base; disc finely and distinctly punctured. *Elytra* widest basally, gradually narrowed and separately rounded apically; each closely and irregularly punctured on inner portion, regularly punctured on outer part of disc and on lateral declivity, and with an oblique compressed double spine at end of basal third, the spine nearly as wide (anterior to posterior) as high, and with first cusp nearly as high as second, which is higher than one-half width of an elytron. *Ventral surfaces* moderately punctured at side. *Legs* slender but with femora quite strongly swollen postmedially. Length 5.6 mm., breadth 1.9 mm.

Female: Antenna one-third again as long as body; elytra without spines. Length 5.2 mm., breadth 1.75 mm.

Paratypes: Males, length 4-5.6 mm., breadth 1.5-1.95 mm.; females, length 3.6-5.7 mm., breadth 1.4-2 mm.

Holotype, male (US 62601), Nanipil (Nanpil), Net District, Ponape, Feb. 27, 1948, H. S. Dybas; allotype, female (US), Colonia, Ponape, Feb. 29, 1948, Dybas. Twenty-one paratypes from Ponape (BISHOP, CM, BM, KU): Colonia, May, July 1927, S. Uchiyama; Feb.-Mar. 1948, Dybas, Jan. 1949, M. Ross; Sankakuyama, July 1939, T. Esaki; Agric. Exper. Sta., Dolen Net (Tolenot) Pk., and Peipalap Pk., June-Sept. 1950, P. A. Adams; Colonia, Sokehs (Jokaj), and Nanpohnmal, Jan. 1953, J. F. G. Clarke; Mt. Temwetemwensekir, Feb. 1948, Dybas, Jan. 1953, Gressitt.

Twelve specimens from Truk: Erin Tonoas (Toloas) Apr. 14, 1940, Yasumatsu and Yoshimura; Nantaku (Civ. Ad. Area), Wena (Moen), Jan. 31 to Apr. 27, 1949, R. W. Potts.

DISTRIBUTION: Eastern Caroline Is.

This species differs from *S.* (*A.*) *latior* in having the elytral spine of the male much wider longitudinally and nearly as wide as high, with two apices instead of one, and also in having the inferior eye-lobe deeper. Truk specimens appear identical with those of Ponape.

Subgenus **Sciadella** Aurivillius, s. str.

85. Sciadella (Sciadella) bioculata (Matsumura and Matsushita), n. comb.

? *Exocentrus sawadai* Kano, 1930, Biogeogr. Soc. Japan, Bull. **1** (3): 242 (*nom. nud.*).

Exocentrus bioculatus Matsumura and Matsushita, 1933, Ins. Matsumurana **7** (3): 108 (Bonins; type in Hokkaido Univ.).

Male: Reddish brown to pitchy, largely clothed with pale pubescence: head pitchy with tawny-buff pubescence; antenna reddish with apices of segments dark, and with thin pale pubescence and a compound fringe of hairs beneath; prothorax pitchy, reddish near apex and base, subevenly clothed with pale pubescence but often with a pair of black spots on disc or several dark marks; elytra reddish with a subbasal area, a median band and a postmedian band of blackish, with thin whitish pubescence in part mottled with dark; ventral surfaces reddish to pitchy, with golden-buff pubescence; legs pale reddish, blackish on apices of femora and tibiae.

Head finely and not very closely punctured; frons nearly twice as wide as high; vertex moderately concave; inferior eye-lobe slightly wider than deep, twice as deep as gena below it. *Antenna* one-half again as long as body; scape less than two-thirds as long as third segment; third slightly longer than fourth; fourth twice as long as fifth. *Prothorax* broadest behind middle, briefly toothed, finely punctured. *Elytra* closely punctured with many subregular rows depressed premedially. *Ventral surfaces* distinctly punctured at sides. Length 4.2-6.8 mm., breadth 1.5-2.5 mm.

Female: Antenna one-fourth longer than body, with a sparser fringe of bristle-like hairs. Length 4-6 mm., breadth 1.4-2.15 mm.

DISTRIBUTION: Bonin Is., 16 specimens.

BONIN IS. CHICHI JIMA: Omura, July 1912, Kuwana; 1930, Daido; 1931, Motoike and Ise; June-July 1949, Kondo and Mead; July 1951, R. Bohart. HAHA JIMA: 1931, Motoike and Ise.

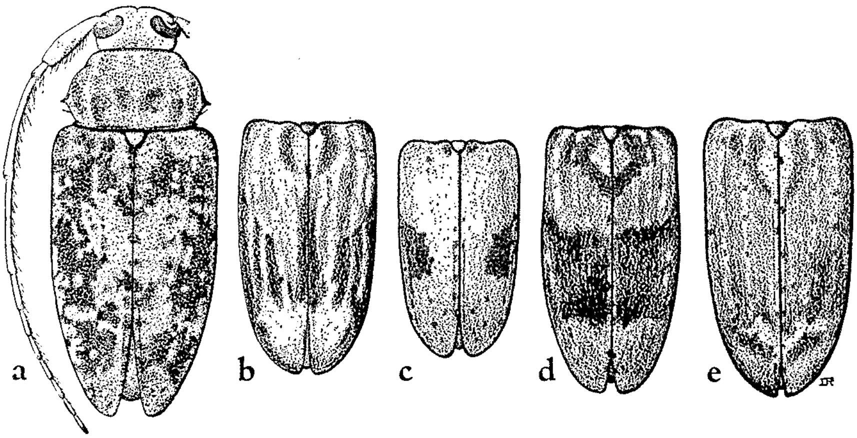


FIGURE 27.—**a**, *Sciadella* (*s. str.*) *iwojimana*; **b-e**, color patterns of *S.* (*s. str.*) *meridiana*.

86. Sciadella (Sciadella) iwojimana Gressitt, n. sp. (fig. 27, *a*).

Male: Reddish brown, in part pitchy or testaceous, with whitish to brown pubescence: head pitchy brown with close tawny-buff pubescence; antenna ochraceous, testaceous distally, with extreme apices of segments pitchy, and with sparse pale pubescence and an extensive pale fringe beneath; prothorax pitchy brown, pale brown at apex and base, with uneven pale pubescence, and some dark brown spots in irregular stripes; elytra pale reddish brown, irregularly marked with dark brown near scutellum, at middle and behind middle, clothed with whitish-buff pubescence marked with subglabrous pale-brown and dark-brown areas or spots, giving a strikingly mottled appearance; ventral surfaces pale reddish brown, slightly pitchy at side, with pale golden-buff pubescence, densest on thoracic pleura; legs testaceous, whitish pubescent, with a preapical blackish band on each femur.

Head finely, and rather closely, punctured; vertex very slightly concave; inferior eye-lobe distinctly wider than deep, barely twice as deep as gena below it. *Antenna* one-third longer than body; scape two-thirds as long as third segment; fourth nearly as long as third, more than two and one-half times as long as fifth. *Prothorax* not quite two-thirds as long as broad, strongly produced at side, widest point behind middle, surmounted by a small tooth pointing outward; disc finely punctured, the interspaces mostly at least as wide as punctures. *Elytra* broad basally, somewhat evenly narrowed, separately rounded apically; each with about six irregular close rows of punctures at middle on inner third, followed by three regular well-spaced rows, and then nearly 10 subregular close rows on outer half. *Ventral surfaces* moderately punctured at side; mesosternal process slightly broader than long. *Legs* with femora stout and tarsi small. Length 6.6 mm., breadth 2.8 mm.

Paratypes: Mostly pale on elytra with very small brown spots and whitish marks in a few broken longitudinal stripes; often with a sublateral pale stripe on pronotum. Length 4-6.3 mm., breadth 1.6-2.7 mm.

Female: Antenna very slightly longer than body, simply fringed beneath; elytra pale with only very small brown spots and some whitish spots of denser pale pubescence. Length 4.6 mm., breadth 1.7 mm.

Holotype, male (CM), Iwo Jima, Volcano Is., Sept. 1-5, 1945, H. S. Dybas; allotype, female (CM), same data; four male paratopotypes (CM, BISHOP, US, CAS), same data.

DISTRIBUTION: Volcano Is. (Iwo Jima).

This species differs from *S. bioculata* in having fewer elytral puncture-rows, the elytra broader basally, the prothorax more evenly produced laterally and the spine directed more at right angles with the body axis, and in the elytra being paler, less distinctly banded with dark, more finely mottled and without subapical eye-spot.

87. Sciadella (Sciadella) meridiana (Ohbayashi), n. comb. (fig. *27, b-e*).

Exocentrus meridianus Ohbayashi, 1941, Tenthredo **3** (3): 227 (Saipan; type in Hirayama Mus., Tokyo).

Exocentrus saipanensis Ohbayashi, 1941, Tenthredo **3** (3): 228 (Saipan; type in Hirayama Mus., Tokyo); new syn.

Nonymoides swezeyi Gressitt, 1942, B. P. Bishop Mus., Bull. **172**: 61 (Guam; type in Bishop Mus.); new syn.

Male: Exceedingly variable in pattern; generally very pale reddish brown, but often varied with pitchy brown markings, often consisting of a triangle behind scutellum and a broad submedian band or pair of postmedian spots, or sometimes with partial stripes; pubescence largely pale, more or less conforming with ground color, but often with denser pale spots or stripes; ventral surfaces largely pale, with whitish pubescence and a few pitchy spots; legs pale with femoral clubs partly dark.

Head finely punctured; inferior eye-lobe about as broad as deep, fully twice as deep as gena below it. *Antenna* one-half again as long as body; scape just over one-half as long as third segment; third slightly longer than fourth; fourth barely twice as long as fifth. *Prothorax* two-thirds as broad as long, swollen at side with a small tooth just behind widest portion pointing somewhat posteriorly; disc very finely and closely punctured. *Elytra* narrowed posteriorly; each with nine or 10 irregular puncture-rows on inner half at middle. *Ventral surfaces* finely punctured at side. Length 3.8-6.6 mm., breadth 1.3-2.5 mm.

Female: Antennal fringe of sparser, stouter hairs; last abdominal segment very large. Length 4.5-6.5 mm., breadth 1.7-2.4 mm.

DISTRIBUTION: Mariana Is., 189 specimens.

N. MARIANA IS. PAGAN: Laguna, Apr. 1940, Yasumatsu and Yoshimura.

S. MARIANA IS. SAIPAN: Mt. Tagpochau, hills east of Garapan, Halaihai-As Teo, Kalabera area, As Mahetog, Papago area, Jan.-Mar. 1945, Dybas, Nov.-Dec. 1944, Hagen; Chalan Kanoa and other localities, Jan.-Feb. 1948, Maehler. TINIAN: Marpo Valley, Mt. Lasso, Tinian Harbor and north of Gurgan Pt., Apr. and Oct. 1945, Dybas, Nov. 1952, Beardsley; Mt. Lasso, June 1946, Townes, on leaves of *Melanolepis multiglandulosa* and at light; Lake Hagoya, on citrus, June 1946, Oakley. AGIGUAN: May-June 1952, Kondo and Peterson. ROTA: June 1946, Townes, from breadfruit leaves. GUAM:

Inarajan and Upi Trail, May 1936, Swezey and Usinger; Mt. Alifan, Apr. 1946, Krauss.

HOSTS: *Citrus, Melanolepis (?),* and *Artocarpus (?).*

88. Sciadella (Sciadella) aureopleura Gressitt, n. sp. (fig. 28, *a*).

Male: Reddish brown with a few pitchy areas, clothed with white to brown pubescence: head dark brown, reddish at antennal supports, with goldish pubescence around eye and on lower part of frons; antenna pale brown, darker on under side of scape, with thin goldish pubescence and a dense compound fringe of nearly erect pale hairs beneath; prothorax reddish brown with denser golden-buff pubescence at side and along median line, brownish on rest of disc; elytra reddish, slightly pitchy on top of basal swelling and on anterior portion of lateral declivity, clothed with pale-brown, buff, and a little dark-brown pubescence, with a broad incomplete band of whitish buff before middle and another behind middle; ventral surfaces reddish brown, partly hyaline, with dense goldish pubescence at side and sparse erect whitish hairs beneath; legs pale with central portions of femora clubs and parts of tibiae pitchy, and with partly goldish pubescence and erect whitish hairs.

Head deeply but not very closely punctured, medially grooved; frons one-half again as wide as high; vertex slightly concave; inferior eye-lobe wider than deep, subtrapeziform, twice as deep as gena below it. *Antenna* nearly one-half again as long as body; scape four-fifths as long as third segment; third a little longer than fourth; fourth twice as long as fifth. *Prothorax* subtrapeziform, subgradually widened to lateral tooth, which is near base; disc finely punctured, depressed before and behind middle. *Elytra* subparallel-sided in basal two-thirds, broadly rounded apically; each somewhat strongly swollen on basal portion near suture, followed by an oblique depression; disc with four or five irregular rows of close punctures near suture, three rows in middle, and about six rows externally at middle. *Ventral surfaces* moderately punctured, even to middle of first abdominal sternite. *Legs* with femora strongly swollen and tarsi small. Length 5.3 mm., breadth 2.1 mm.

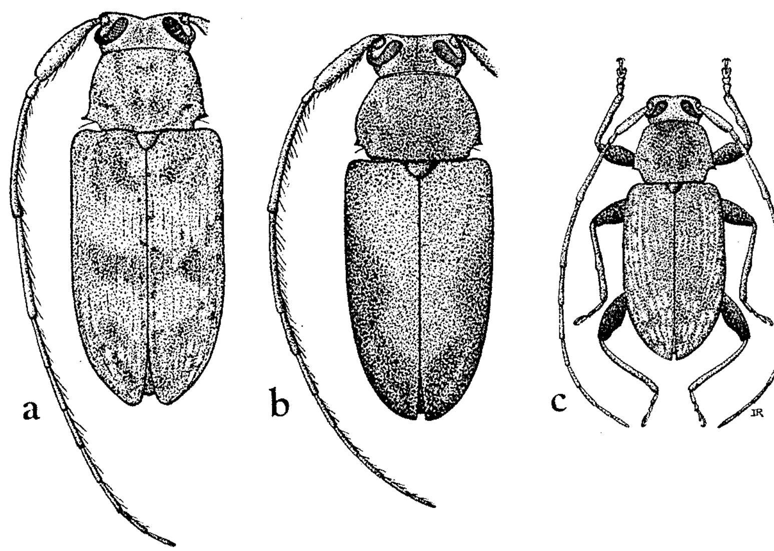


FIGURE 28.—a, *Sciadella (s. str.) aureopleura;* b, *S. (s. str.) argentipleura;* c, *S. (Micronesiella) esakii.*

Female: Darker, with a large blackish spot just behind middle of each elytron; antenna one-third longer than body. Length 5.8 mm., breadth 2.15 mm.

Paratypes: 4.6-5.6 mm., breadth 1.8-2.2 mm.

Holotype, male (US 62603), hill behind Yaptown (lower slope of Mt. Madaade), Yap I., Yap, 50 m., light trap, Dec. 1, 1952, Gressitt; allotype, female (US), same data except Dec. 2. Twenty-three paratypes (US, BISHOP, BM, MCZ): Some paratopotypes, Nov. 28 to Dec. 1, 1952, Gressitt; Rul, Sept. 4, 1939, T. Esaki; Kolonia (Yaptown), July 13, 1946, H. K. Townes, Mar. 1-8, 1949, K. L. Maehler, July-Aug. 1950, R. J. Goss; Gagil, July 14, 1946, R. G. Oakley (under bark of dead branch of native tree).

Two specimens, Nantaku (Civ. Ad. Area), Wena (Moen), Truk, Feb. 6 and Mar. 2, 1949, R. W. Potts. One, Etal I., Etal Atoll, Nov. 1952, Beardsley.

DISTRIBUTION: Caroline Is.

This species differs from *S. meridiana* in having the pronotal and elytral punctures larger and less dense, the prothorax and inferior eye-lobe each more trapeziform, and the ventral surfaces more densely pubescent and more pilose.

89. Sciadella (Sciadella) argentipleura Gressitt, n. sp. (fig. 28, *b*).

Male: Reddish brown to pitchy, with silvery-white to brown pubescence; head pitchy, moderately clothed with pale golden-buff pubescence; antenna dark reddish brown with apices of segments pitchy, with thin pale pubescence and with a compound fringe of moderately long pale hairs beneath; prothorax dark brown to reddish, moderately clothed with golden-buff pubescence, in part thinner on disc, forming indistinct brown stripes; elytra dark brown, each somewhat reddish obliquely behind humerus, near suture postmedially, and at extreme apex, largely clothed with silvery-buff pubescence, varied with brown spots and tawny buff externally beyond basal two-fifths; ventral surfaces pale reddish brown, darker at side and on middle of abdomen, rather densely clothed with silvery at side; legs blackish with bases of femora and tibiae testaceous, with silvery to golden-buff pubescence and long whitish hairs.

Head as broad as prothorax at apex, finely but distinctly punctured; frons twice as wide as deep; vertex slightly concave in middle; inferior eye-lobe wider than deep, fully twice as deep as gena below it. *Antenna* nearly one-half again as long as body; scape slender, three-fourths as long as third segment; fourth slightly shorter than third, twice as long as fifth. *Prothorax* just over two-thirds as long as broad, strongly produced at side, widest just behind middle, and with a small acute tooth half way between middle and base. *Elytra* distinctly broader than prothorax, widest at base, evenly narrowed and rounded apically; each closely and subregularly punctured on inner third of disc, more regularly and less closely punctured on remainder. *Ventral surfaces* punctured at side. *Legs* with femora strongly swollen and tarsi small. Length 5.5 mm., breadth 2.05 mm.

Holotype, male (US 62604), Wena (Moen), Truk, Feb. 1954, J. W. Beardsley.

Two specimens, somewhat questionably the same species, Hare I. and Matiro I., Kapingamarangi Atoll, Aug. 3, and 4, 1946, H. K. Townes.

DISTRIBUTION: Eastern Caroline Is.

This species differs from *S.* (*Neosciadella*) *brunnipes* Dillon and Dillon in having the dark area of the elytra less distinctly demarked, largely pale-pubescent, and in having the prothoracic tooth shorter, the inferior eye-lobe much larger, the body more dorsoventrally compressed, and in other characters. In this species the mesosternal process is much broader than long, the character used by the Dillons in erecting the genus *Vitilevua*. This form, however, is a true *Sciadella*.

Subgenus **Micronesiella** Gressitt, new subgenus

Body small; vertex slightly concave; inferior eye-lobe about as wide as deep, deeper than gena below it, antenna a little longer than body, with third and fourth segments subequal and fifth shorter than scape; prothorax transverse, convex, swollen at middle of side and with a small acute tooth on posterior side of swelling; elytra more or less parallel-sided, rounded apically, seriate-punctate, but more densely and less regularly punctured near suture; mesosternal process nearly as broad as long to much longer than broad; tarsi fairly slender.

Type: *Sciadella* (*Micronesiella*) *esakii,* new species.

Range: Caroline and Mariana Islands.

This subgenus differs from *Sciadella* Aurivillius, *s. str.,* in having the elytra not carinate laterally, but subevenly convex, and the body more glabrous, without long flying hairs. It differs from *Miaenia* Pascoe in having the antenna shorter, with the scape shorter, and the fourth segment longer in relation to the fifth segment. The characters would seem to justify generic rank, but some of the species before me show close intergradation between the following type species and the type of *Sciadella*.

90. **Sciadella (Micronesiella) esakii** Gressitt, n. sp. (fig. 28, *c*).

Male: Pale to dark reddish brown, clothed in part with golden pubescence, abdomen and femora largely pitchy black; head reddish brown with golden pubescence, thinner on frons; antenna ochraceous with fine erect golden hairs and a single fringe of dark hairs beneath; prothorax reddish brown with greenish-gold pubescence, dense at side and sparse on center of disc; elytra dark reddish brown with golden-buff pubescence in small patches, bands, or stripes, leaving incomplete stripes of dark brown; ventral surfaces reddish brown, darker in part, with thin whitish-gray pubescence; legs ochraceous with femora dark, and with silver to golden-buff pubescence.

Head finely and not very closely punctured; frons about one-half again as wide as deep; vertex shallowly concave; inferior eye-lobe slightly wider than deep, slightly deeper than gena below it. *Antenna* slender, one-half again as long as body; scape fusiform-cylindrical, three-fourths as long as third segment; third and fourth equal in length, each twice as long as fifth. *Prothorax* not quite four-fifths as long as broad, evenly broadened from apex almost to basal quarter, where it is armed with a slender acute oblique spine and then suddenly narrowed. *Elytra* very slightly broadened to behind middle, narrowed and conjointly rounded apically; each with five to seven irregular rows of dense punctures on inner portion and about 10 regular rows on outer portion at middle. *Ventral surfaces* deeply punctured on side. *Femora* moderately stout; tarsi fairly slender. Length 3.6 mm., breadth 1.25 mm.

Paratypes: Length 2.1-3 mm., breadth 0.9-1.3 mm.

Female: Antenna slightly longer than body. Length 3.5 mm., breadth 1.4 mm.

Holotype, male (US 62605), Mt. Unibot, Ton (Tol) I., Truk, from felled native tree, Jan. 5, 1953, Gressitt; allotype, female (KU), Sabote-Epin, Pata, Ton, Apr. 10, 1940, Yasumatsu and Yoshimura. Seven paratypes, males (US, BISHOP, BM): Tonoas (Dublon) I., May 28, 1946, Townes; Mt. Unibot, Ton (one under bark of dead breadfruit), Dec. 31, Jan. 2, and Feb. 4, 1953, Gressitt; one, Tonoas (Dublon), Oct. 17, 1952, Beardsley.

DISTRIBUTION: Eastern Caroline Is. (Truk).

This species differs from *minimus* Blair in having the prothorax strongly spined and more densely punctured, the antenna with a longer fringe, the pubescence more golden, and the elytra more produced apically.

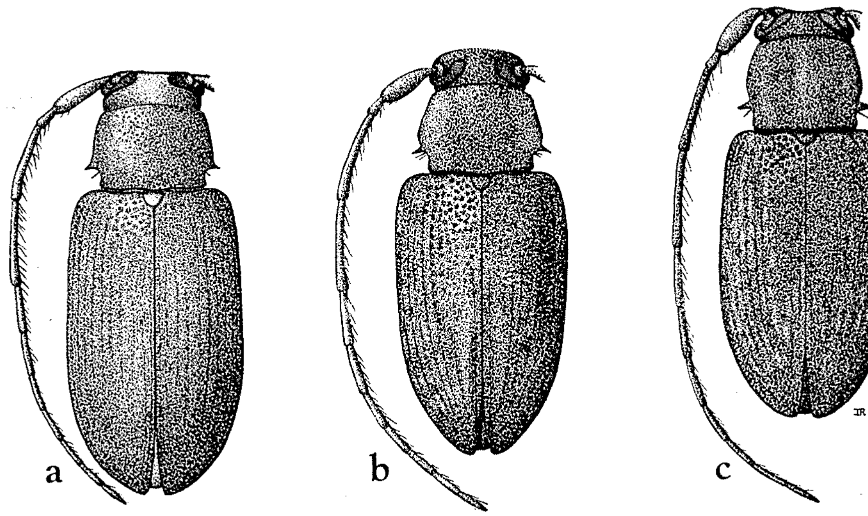


FIGURE 29.—a, *Sciadella (Micronesiella) boharti;* b, *S. (M.) mariana;* c, *S. (M.) subcylindrica.*

91. Sciadella (Micronesiella) boharti Gressitt, n. sp. (fig. 29, *a*).

Female: Entirely reddish brown; legs slightly paler; body thinly clothed with pale-buff pubescence, on elytra in part forming longitudinal stripes by reason of the glabrous puncture-rows, and with a few vague preapical brown spots and a broad postmedian, largely glabrous, band; antenna with a sparse fringe of oblique dark hairs beneath.

Head finely and somewhat closely punctured; frons one-half again as broad as deep; vertex nearly horizontal; inferior eye-lobe subtriangular, slightly wider than deep, deeper than gena beneath it. *Antenna* one-fifth longer than body; scape slender, five-sixths as long as third segment; third and fourth subequal; fourth nearly twice as long as fifth. *Prothorax* two-thirds as long as broad, subobtuse at side, widest just behind middle, with tooth acute, not very long, closer to middle than base and directed slightly backward; disc feebly convex, deeply and very closely punctured, roughly with about 12 punctures along median line. *Elytra* more than three times as long as prothorax, very slightly widened to behind middle, broadly and conjointly rounded apically; each with four or

five irregular close rows near suture and about nine rows on remainder, the rows confused on lower part of lateral declivity. *Ventral surfaces* minutely punctulate, more deeply punctured at side of thorax. *Legs* with femora moderately swollen. Length 2.55 mm., breadth 1.05 mm.

Holotype, female (US 62606), Agrihan I., Mariana Is., July 26, 1951, R. M. Bohart. An additional male specimen and a female specimen with the same data are not designated types, as they are broader. However, they may belong to the same species and differ from the following species in some of the same respects.

DISTRIBUTION: North Mariana Is. (Agrihan).

This species differs from the following species in having the body more narrow, the elytra relatively longer, the inferior eye-lobe more shallow, the prothoracic spine shorter, the elytral apices more broadly rounded, and the prothorax entirely reddish.

92. Sciadella (Micronesiella) mariana Gressitt, n. sp. (fig. 29, *b*).

Nonymoides minimus, Gressitt (not of Blair), 1942, B. P. Bishop Mus., Bull. **172**: 62 (Guam).

Male: Reddish brown, varied with paler or darker and with some thin pale pubescence: head reddish, largely clothed with pubescence; antenna reddish ochraceous, subglabrous, with a very sparse fringe of bristle-hairs beneath; prothorax pitchy across middle, reddish at apex and base, and with grayish-white pubescence, which is denser along each side of disc; elytra reddish, slightly duller behind scutellum, with pale pubescence arranged more or less in irregular transverse bands; ventral surfaces reddish with pale pubescence at side; legs reddish with bases of femora testaceous.

Head finely punctured; vertex slightly concave; inferior eye-lobe triangular, slightly broader than deep, one-half again as deep as gena below it. *Antenna* nearly one-half again as long as body; scape nearly three-fourths as long as third segment; third and fourth subequal; fourth nearly twice as long as fifth. *Prothorax* nearly three-fourths as long as broad, moderately rounded at side, broadest just behind middle except for lateral tooth, which is slightly closer to middle than base, about one-half as long as second antennal segment and directed somewhat backward; side emarginate behind tooth; disc deeply and densely punctured, with about 16 punctures along median line. *Elytra* less than twice as long as broad, slightly broadened to behind middle, narrowed and subrounded apically; each with about five irregular close rows of punctures near suture and about seven regular rows on remainder at middle, with some confused punctures on lower side. *Ventral surfaces* micropunctulate, with deep punctures on side of thorax. *Femora* rather strongly swollen. Length 2.5 mm., breadth 1 mm.

Female: Elytra with pale pubescence with scattered small brown spots and a broad postmedian brown band; scape darkened distally. Length 3.5 mm., breadth 1.45 mm.

Paratypes: Body generally pale with dark postmedian elytral band, or with small brown or pale spots; sometimes body darker, with stripes or spots of pale pubescence. Length 2-3.8 mm., breadth 0.85-1.6 mm.

Holotype, male (BISHOP 2393), Machanao, Guam, June 5, 1936, O. H. Swezey; allotopotype, female (BISHOP), June 30, Swezey; 415 additional, of which 100 are designated paratypes (US, CAS, BISHOP, BM, KU, and other institutions). Guam: Ritidian Pt., Machanao, Tarague, Upi Trail,

Agana, Orote Peninsula, Inarajan, Apr.-June 1936, some from citrus, Swezey and Usinger; Talofofo, Sept. 1937, Oakley, Pt. Ritidian and Pt. Amantes, light trap, June 20-30, 1945, G. Bohart and Gressitt; Mt. Alifan, Apr. 1946, Krauss; Fadang, Piti, Asan, and other localities, May 1945, Oct. 1947, Dybas. Pagan: Songsong and Regusa-Tarague, Apr. 25-28, 1940, Yasumatsu and Yoshimura. Saipan: Matansha-Kalabera, May 1940, Yasumatsu and Yoshimura; Laulau Bay, Papago area, Pidos Kalahe (Mt. Magpi), Halaihai-As Teo, Hagman Pt., Talofofo Ridge, Mt. Tagpochau, Kalabera area, Lake Susupe, As Mahetog, and other localities, Jan.-Apr. 1945, Dybas. Tinian: Tinian Harbor, Mt. Lasso, Gurgan Pt., Marpo Valley, Apr. 1945, Dybas; Lake Hagoya, on citrus, June 10, on *Myoporum* and other shrubs, June 11, 1946, Townes. Rota: Forest at 275 m., June 24, 1946, Hosaka; Rugi, June 29, 1946, Oakley.

DISTRIBUTION: Mariana Is.

HOSTS: *Citrus, Myoporum,* and others (dead branches).

This species differs from *minimus* Blair in having the prothorax tuberculate, the elytra less abbreviated posteriorly and less broadened behind the middle, the inferior eye-lobe less vertical, and in other characters.

93. Sciadella (Micronesiella) subcylindrica Gressitt, n. sp. (fig. 29, *c*).

Male: Reddish brown, in part darker or paler, partly clothed with thin grayish pubescence: head dark reddish, moderately pubescent; antenna paler reddish, thinly pubescent, with a single fringe of oblique bristle-hairs beneath; prothorax pitchy reddish, paler at apex and base, thinly clothed with pale; elytra dark reddish brown, irregularly clothed with thin gray pubescence, leaving many small squarish glabrous brown spots; ventral surfaces dull reddish, pitchy at side, with thin gray pubescence; legs reddish brown, testaceous at femoral bases and on parts of tarsi.

Head nearly as broad as prothorax, finely and somewhat closely punctured; frons much wider than deep; vertex very shallowly concave; inferior eye-lobe slightly deeper than wide, nearly twice as deep as gena below it. *Antenna* one-half again as long as body; scape slightly more than two-thirds as long as third segment; third and fourth subequal; fourth nearly twice as long as fifth. *Prothorax* nearly as long as broad, subcylindrical, constricted basally, with a slender, acute spine behind middle, nearly as long as second antennal segment and directed slightly backward; disc feebly convex, closely and deeply punctured, with about 20 punctures along median line. *Elytra* subparallel-sided, rounded apically; each with dense punctures in about six irregular rows near suture and about nine regular rows on remainder at middle. *Ventral surfaces* closely punctulate, deeply punctured at side. *Femora* stout; tarsi slender. Length 2.55 mm., breadth 1.05 mm.

Female: Antenna barely longer than body. Length 3.3 mm., breadth 1.25 mm.

Paratypes: Length 2.1-3.2 mm., breadth 0.9-1.3 mm.

Holotype, male (US 62607), Koror I., Palau Islands, Nov. 18, 1947, H. S. Dybas; allotype, female (US), Ulimang, Babelthuap I., Dec. 10, 1947, Dybas. Twenty-two paratypes (US, CM, BM, KU): Ngerehelong, Ulimang, and southwest of Ulimang, Dec. 1947, Dybas; Koror, Limestone Ridge, 40 m., Dec. 14, 1952, Gressitt; Ngarmalk I. ("NW Auluptagel"), Sept. 1952,

Krauss, Dec. 3, 1952, Gressitt; Ngurukdabel (Urukthapel), Feb. 21, 1936, T. Esaki; Ngeremediu, northeastern Ngurukdabel, 180 m., Dec. 5, 1952, Gressitt; Ngergoi (Garakayo) I., Aug. 7, 1945; northeast coast, Peleliu, Jan. 24, 1948, Dybas; Angaur, Feb. 5, 1948, Dybas.

DISTRIBUTION: Western Caroline Is. (Palau).

This species differs from *S. esakii* in being much more slender, with the prothorax nearly as long as broad, the antenna more feebly fringed, and the color different and in other characters.

94. **Sciadella (Micronesiella) palauicola** Gressitt, n. sp. (fig. 30, *a*).

Male: Dark brown, varied with pitchy to testaceous, clothed with pale and dark pubescence: head pitchy, reddish on vertex and labrum, with moderate gray-buff pubescence; antenna pale reddish, duller on distal portion of scape, with a sparse dark fringe beneath, and some shorter pale suberect hairs; prothorax pitchy brown, reddish at apex and base and darker at side, thinly clothed with gray buff, with a subglabrous oblong on each side of median line; elytra brown, marked with pitchy at base, side, and middle, irregularly clothed with buff pubescence, for most part forming stripes and spots of pale; ventral surfaces largely pitchy, thinly pale pubescent, denser at side of thorax; legs reddish brown, with femora and tibiae testaceous basally and pitchy distally.

Head nearly as broad as prothorax, deeply, and in part closely, punctured; frons more than one-half again as broad as deep, convex; vertex slightly concave; inferior eye-lobe slightly wider than deep, nearly twice as deep as gena below it. *Antenna* more than one-half again as long as body, slender; scape three-fourths as long as third segment;

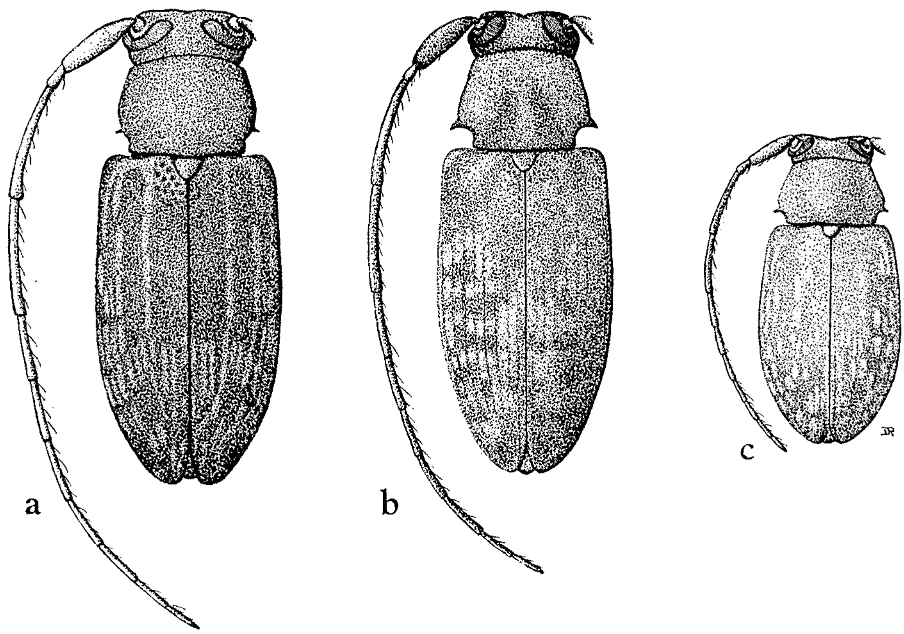


FIGURE 30.—a, *Sciadella* (*Micronesiella*) *palauicola;* b, *S.* (*M.*) *attenuata;* c, *S.* (*M.*) *saltator.*

third barely longer than fourth; fifth two-thirds as long as fourth. *Prothorax* three-fourths as long as broad, convex at middle of side, suddenly narrowed posteriorly behind the acute tooth, which is one-half as long as second antennal segment; disc moderately convex across middle, deeply and irregularly punctured, with about 18 punctures along median line. *Elytra* subparallel-sided in basal two-thirds, narrowed and separately rounded apically; each with dense irregular punctures near suture in about four rows at middle, remainder with about nine rows at middle, the rows confused at side. *Ventral surfaces* closely punctulate, strongly punctured at side. *Femora* subpedunculate-clavate; hind tarsus three-fifths as long as tibia. Length 3.2 mm., breadth 1.2 mm.

Female: Antenna nearly one-half again as long as body; elytra very slightly broadened behind middle. Length 3.75 mm., breadth 1.5 mm.

Paratypes: Elytral pattern highly varied, often with a large postmedian lateral spot on elytron. Length 2.7-5.2 mm., breadth 1.05-2 mm.

Holotype, male (US 62608), Limestone Ridge, northeast Koror, 40 m., Dec. 14, 1952, Gressitt; allotopotype, female (US), same data; 112 additional specimens, of which 40 are designated paratypes (US, CM, BISHOP, BM, KU): Ngerehelong and Ulimang, north Babelthuap, Dec. 1947, Dybas; Ngaremeskang, east Ngatpang, and Iwang, Babelthuap, Dec. 1952, Gressitt; Imeliik (Aimeliik), Apr. 1954, Beardsley; Koror, Nov. 1947, Dybas; paratopotypes, Gressitt; Ulebsehel (Aurapushekaru), Jan. 1948, Dybas; Ngarmalk I., Sept. 1952, Krauss; Ngeremeyaous I., Nov. 1947, Dybas; Ngergoi (Garakayo) I., Aug. 1945, Dybas; Peleliu, Aug. 1945, Dybas, Hagen and, Jan. 1948, Dybas; Angaur I., Aug. 1945, Dybas and May 1954, Beardsley. Paratypes from most of above localities.

DISTRIBUTION: Western Caroline Is. (Palau).

This species differs from *S. subcylindrica* in being stouter and more flattened, having the prothorax distinctly broader than long, having the elytral pattern more varied, and in other characters.

95. **Sciadella (Micronesiella) attenuata** Gressitt, n. sp. (fig. 30, *b*).

Male: Reddish brown, in part darker or paler; largely clothed with buff pubescence: head reddish, pitchy on frons, with sparse pale pubescence; antenna reddish brown, duller at apices of segments, with a moderately sparse fringe of dark bristle-hairs beneath, and some short, erect, pale hairs distally; prothorax reddish brown, darker at side, with pale pubescence in a few vague longitudinal stripes; elytra reddish with dark-brown spots, partly in bands, and with incomplete pale pubescence, partly in broken longitudinal stripes; ventral surfaces pale reddish brown, darker, but more pale-pubescent at side; legs brown, with bases of femora and tarsi testaceous.

Head practically as broad as prothorax, deeply and subdensely punctured; frons one-half again as broad as deep, convex; vertex feebly concave; inferior eye-lobe distinctly wider than deep, one-half again as deep as gena below it. *Antenna* nearly one-half again as long as body; scape two-thirds as long as third segment; third a little longer than fourth; fifth three-fifths as long as fourth. *Prothorax* four-fifths as long as broad, moderately convex at side, strongly constricted basally behind lateral tubercle, which is acute and one-half as long as second antennal segment; disc deeply punctured, with about 16 punctures along median line. *Elytra* parallel-sided, narrowed and subrounded apically; each moderately swollen near base followed by an oblique depression, with dense irregular

punctures near suture in about four rows at middle and with about nine rows on remainder, regular on disc and irregular at side. *Ventral surfaces* partly punctulate, deeply punctured at side of thorax. *Femora* subpedunculate-clavate; hind tarsus just over one-half as long as tibia. Length 3.1 mm., breadth 1.15 mm.

Female: Antenna one-third longer than body; elytron with subbasal spot and postmedian irregular band of dark brown. Length 3.8 mm., breadth 1.4 mm.

Paratypes: Elytral patterns varied, with pale spots and often basal and postmedian dark marks. Length 3.1-4.5 mm., breadth 1.15-1.7 mm.

Holotype, male (US 62609), Dugor to Rumu, 10 m., Yap I., Yap, Nov. 29, 1952, Gressitt; allotype, female (US), hill behind Yaptown (Kolonia), 50 m., Dec. 1, 1952, Gressitt. Twelve paratypes (US, BISHOP, BM, MCZ): West coast, Yap I., July 8, 1951; a paratopotype, same data as for type; Mt. Madaade (Matade), 95 m., light trap, Dec. 1, 2, 1952, Gressitt; Kolonia, July 14, 1946, Townes, July 1950, Goss, Mar.-Apr. 1954, Beardsley.

DISTRIBUTION: Western Caroline Is. (Yap).

This species differs from *S. palauicola* in having the elytra relatively longer and more parallel-sided, the inferior eye-lobe more transverse, the scape more slender, and the fifth antennal segment shorter in relation to the fourth.

96. **Sciadella (Micronesiella) saltator** Gressitt, n. sp. (fig. 30, *c*).

Male: Reddish brown to testaceous, in part clothed with pale gray; head reddish, moderately pubescent; antenna reddish ochraceous, with a very sparse dark fringe beneath, thin pubescence and short suberect pale hairs distally; prothorax reddish, subdensely clothed at side of disc with silvery-buff pubescence with a slight greenish tinge; elytra reddish with many small patches of pale pubescence with a bluish-white tinge, in part forming subtransverse bands; ventral surfaces reddish, thinly pubescent; legs reddish, testaceous at bases of femora and tibiae and slightly dark on femoral clubs.

Head as broad as apex of prothorax, irregularly, in part sparsely, punctured; frons one-half again as broad as deep, moderately convex; vertex horizontal; inferior eye-lobe triangular, slightly deeper than wide, fully one-half again as deep as gena below it. *Antenna* one-third longer than body; scape fusiform-cylindrical, nearly three-fourths as long as third segment; third barely longer than fourth; fifth just over one-half as long as fourth. *Prothorax* three-fourths as long as broad, rather strongly convex at side, constricted basally, with tooth acute and less than one-half as long as second antennal segment; disc convex, moderately punctured, with about 12 punctures along median line. *Elytra* short, nearly two-thirds as broad as long, widened to behind middle, broadly rounded apically; each irregularly punctured near suture in about five rows at middle, with about nine subregular rows of punctures on remainder. *Ventral surfaces* moderately punctured at side. *Femora* stout; hind tarsus just over one-half as long as tibia. Length 2 mm., breadth 0.9 mm.

Female: Antenna barely longer than body; humeri and femora testaceous; elytra with darker brown spots. Length 2.7 mm., breadth 1.1 mm.

Paratypes: Dorsum sometimes dark brown; pubescence sometimes yellowish. Length 1.8-3.3 mm., breadth 0.8-1.3 mm.

Holotype, male (US 62610), Mt. Madaade (Matade), 95 m., light trap, Dec. 1, 1952, Gressitt; allotopotype, female (US), sweeping *Hibiscus,* Dec. 2, Gressitt. Nineteen paratypes (US, BISHOP, BM, MCZ): Dugor-Rumu, 10

m., Nov. 29, 1952, Gressitt; several paratopotypes, Gressitt; behind Yaptown (Kolonia) and southwest of Yaptown, Nov. 30 to Dec. 3, Gressitt; central Yap I., July 1950, Goss; Yap I., Oct. 1952, Krauss; Kolonia, Apr. 26, 1954, Beardsley; Gagil District, July 14, 1946, Oakley.

DISTRIBUTION: Western Caroline Is. (Yap).

HOST: *Hibiscus tiliaceus.*

This species differs from *S. attenuata* in being much more abbreviated and smaller, with shorter antenna, broadly rounded elytra, and so on. This species clearly has the habit of jumping several centimeters when disturbed. The femora are no more strongly swollen than those of the other species.

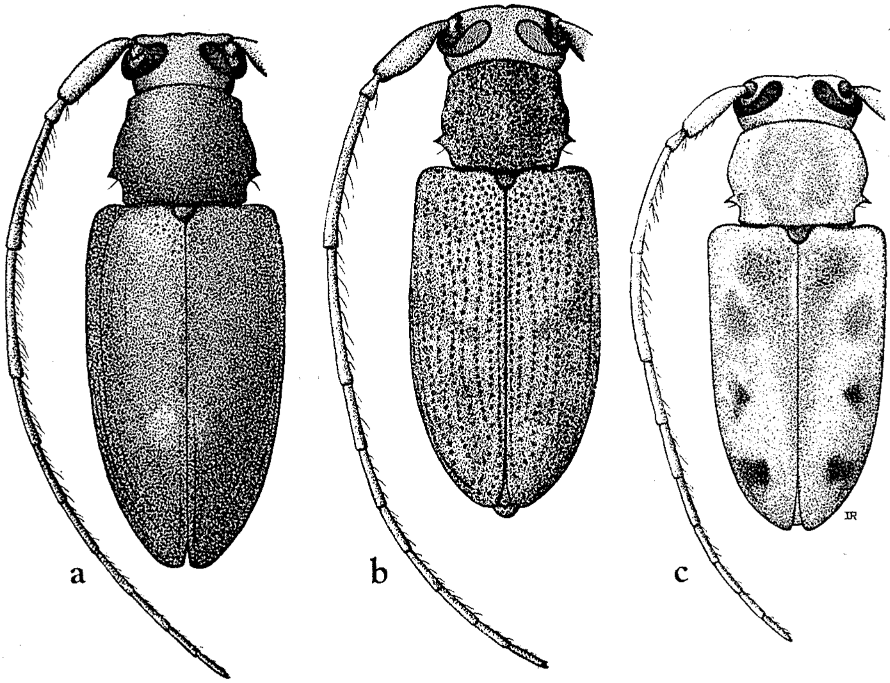


FIGURE 31.—**a**, *Sciadella (Micronesiella) atollorum;* **b**, *S. (M.) townesi;* **c**, *S. (M.) versicolor.*

97. Sciadella (Micronesiella) atollorum Gressitt, n. sp. (fig. 31, *a*).

Male: Pale reddish brown to ochraceous, almost without dark markings, and largely clothed with pale pubescence: head dull reddish brown, slightly pitchy on frons with moderately pale-buff pubescence; antenna ochraceous with distal two-thirds of scape pitchy brown; prothorax reddish, slightly pitchy at side and just behind middle of disc, rather closely clothed with pale gray-buff pubescence, a little denser and more golden at side of disc; elytra pale reddish brown, rather evenly clothed with gray buff to tawny buff giving a fawn-colored appearance, slightly paler behind middle near suture; ventral surfaces pinkish to brownish ochraceous, moderately pale-pubescent, with erect pale hairs on pro-

and mesothoracic sterna; legs ochraceous, testaceous at femoral bases and pitchy on thickest parts of femoral clubs and on tibial apices.

Head distinctly narrower than prothorax, moderately punctured; frons convex, nearly one-half again as broad as high; vertex slightly concave; inferior eye-lobe subrounded, a little broader than deep, nearly twice as deep as gena below it. *Antenna* one-half again as long as body; scape nearly three-fourths as long as third segment; third slightly longer than fourth; fifth a little more than one-half as long as fourth. *Prothorax* four-fifths as long as broad, strongly convex just behind middle of side, suddenly constricted basally just behind a short, broad tooth which is less than one-half as long as second antennal segment; disc rather convex across middle, closely punctured, with about 20 punctures along median line. *Elytra* rather broad, parallel-sided in basal half, gradually narrowed and subrounded apically, not very convex; each with a swelling near scutellum followed by an oblique depression, with dense irregular punctures near suture in about four rows at middle and with about 11 rows on remainder at middle, the rows on lateral declivity confused. *Ventral surfaces* entirely punctulate, a few distinct punctures on side of thorax. *Femora* strongly swollen; hind tarsus five-eighths as long as tibia. Length 4.9 mm., breadth 1.9 mm.

Female: Each elytron with an irregular postmedian pale-brown spot; antenna nearly one-half again as long as body. Length 4.9 mm., breadth 1.95 mm.

Paratypes: Ground color sometimes dark reddish brown; elytra with pale pubescence often forming stripes broken by small brown spots, rarely with a nearly complete postmedian brown band. Length 3.8-5 mm., breadth 1.4-2 mm.

Holotype, male (US 62611), Fuasubukaru I., Faraulep Atoll, western Carolines, Feb. 4, 1953, J. W. Beardsley; allotype, female (US), Potangeras I., Ulithi Atoll, Nov. 10, 1947, H. S. Dybas. Fourteen paratypes (US, BISHOP, CM, BM): Tobi I., Sept. 12, 1952, Krauss; several, same data as for allotype, Dybas; one, Falalop I., Ulithi, Oct. 7, 1952, Krauss; Fais I., Apr. 28, 1954, Beardsley; Utagal and Saliap Islets, Woleai Atoll, Sept. 20, 1952, Krauss; Elato I., Elato Atoll, Feb. 5, 1953, Beardsley; Lamotrek I., Lamotrek Atoll, Feb. 5, 1953.

DISTRIBUTION: Western Caroline atolls and raised atolls.

This species differs from *S. palauicola* in being broader and much paler and generally without dark markings, in having the prothoracic tooth shorter and broader, and in other characters. Some of the paratypes do not agree too closely in structure with the type, though all are pale. More than one subspecies may be involved, and some specimens are more closely related to *S. palauicola*. Again, the series assigned to *S. palauicola* may include more than a single kind.

98. Sciadella (Micronesiella) townesi Gressitt, n. sp. (fig. 31, *b*).

Male: Testaceous to pitchy brown, irregularly clothed with pale pubescence: head reddish pitchy with golden-buff pubescence; antenna testaceous with scape reddish brown, very sparsely pubescent, with a sparse fringe of dark bristle-hairs beneath and a few shorter, suberect pale hairs distally; prothorax dark reddish brown, paler at apex and base, with golden-buff pubescence forming a narrow median stripe and a broader stripe at side of disc; elytra pale brown with irregular darker brown markings, with uneven thin pale-golden buff pubescence, and a fringe of long pale hairs; ventral surfaces testaceous,

pitchy at side of thorax, with thin silvery-buff pubescence; legs pale to dark brown with femora testaceous basally and pitchy distally.

Head slightly narrower than prothorax, deeply and irregularly punctured; frons a little broader than deep; vertex shallowly concave; inferior eye-lobe rounded-triangular, about as broad as deep, one-half again as deep as gena below it. *Antenna* nearly two-thirds again as long as body; scape three-fifths as long as third segment; third barely longer than fourth; fifth two-fifths as long as fourth. *Prothorax* two-thirds as long as broad, feebly broadened at side, somewhat trapeziform anterior to suddenly constricted base, with a broad tooth barely one-half as long as second antennal segment; disc convex across middle, deeply but not very closely punctured, with about 15 punctures along median line. *Elytra* fairly long, parallel-sided, narrowed and separately rounded apically; each subvertical at side, convex posteriorly, with about 15 rows of punctures at middle, those on lateral declivity and inner portion of base somewhat confused. *Ventral surfaces* distinctly punctured at side. *Femora* not very strongly swollen; hind tarsus a little more than one-half as long as tibia. Length 3.3 mm., breadth 1.25 mm.

Female: Largely dark brown; antenna brownish ochraceous; elytra with pale pubescence and narrow dark-brown glabrous bands. Length 3.8 mm., breadth 1.45 mm.

Holotype, male (US 62692), Hydroelectric Plant, near Nanipil, Ponape, Aug. 9, 1946, H. K. Townes; allotype, female (BISHOP 2394), Mt. Temwetemwensekir, light trap, 180 m., Jan. 15, 1953, Gressitt.

DISTRIBUTION: Eastern Caroline Is. (Ponape).

This species differs from the following species in being less convex above, in having the appendages slightly duller, the fifth antennal segment shorter, the pronotum less evenly convex and less densely punctured, the elytra fringed; and the body pubescence thinner and pale buff instead of yellowish or bluish gray.

99. Sciadella (Micronesiella) versicolor Gressitt, n. sp. (fig. 31, *c*).

Male: Testaceous to pitchy brown, clothed with golden to brown pubescence: head pitchy with golden pubescence, which is paler and thinner on lower portions; antenna pale testaceous with a thin fringe of dark bristle-like hairs beneath; prothorax pitchy brown with rather close goldish-buff pubescence above and more whitish at side; elytra dark brown, with pale golden-gray to goldish-white pubescence, with four brownish discal areas on each, roughly near base of each quarter, the last two more distinct, but not very large; ventral surfaces reddish brown, pitchy at side, testaceous at end of abdomen, with thin pale pubescence; legs pale testaceous with sparse pale pubescence.

Head finely and not very closely punctured; frons a little wider than deep; vertex slightly concave; inferior eye-lobe slightly deeper than wide, twice as deep as gena below it. *Antenna* two-fifths longer than body; scape three-fourths as long as third segment; third and fourth subequal in length; fourth nearly twice as long as fifth. *Prothorax* not quite three-fourths as long as broad, moderately convex at middle of side with a slender, acute tooth a little closer to middle than to base and directed slightly backward; disc convex, finely and very closely punctured. *Elytra* distinctly narrowed in basal two-thirds, narrowed and subrounded apically; each finely and closely punctured in about five irregular rows near suture, then seven regular rows at middle and irregularly on lateral declivity. *Ventral surfaces* deeply and closely punctured at side. *Legs* slender with femora subpedunculate-clavate. Length 3.1 mm., breadth 1.2 mm.

Female: Black, in part pitchy red beneath; antenna reddish brown beyond scape; largely clothed with close gray-blue pubescence, with vague dark areas on pronotal disc,

parascutellar swelling of each elytron, and with a postmedian and a preapical black band on elytra, both incomplete and the former much larger. Length 3.8 mm., breadth 1.5 mm.

Paratypes: Males sometimes with slightly bluish-gray instead of yellowish pubescence, sometimes with only basal dark spot on each elytron; females often yellowish gray with a large postmedian brown spot, two small basal spots and one small apical spot, on each elytron. Length 2.2-3.9 mm., breadth 0.8-1.55 mm.

Holotype, male (US 62693), Mt. Kupwuriso, summit, 600 m., Mar. 10, 1948, H. S. Dybas; allotype, female (US), Mt. Temwetemwensekir, 180 m., light trap, Jan. 19, 1953, Gressitt. Twenty-five paratypes (US, CM, BISHOP, BM, MCZ): Dolen Nankep (Mt.), Aug. 10, 1946, H. K. Townes; Mts. Nahnalaud, Dolen Kiepw (Tolenkiup), Temwetemwensekir, Pairot (Beirut), June-Sept. 1950, P. A. Adams; Nahnalaud, Pairot, Temwetemwensekir, and between Nanipil and Pairot, March 1948, Dybas. All were taken above 150 m. altitude.

DISTRIBUTION: Eastern Caroline Is. (Ponape).

This species differs from *S. esakii* in being more slender, having the appendages much paler, having the pubescence more even and largely pale golden or bluish, and in being without numerous small spots on the elytra.

Genus **Nonymoides** Blair

Nonymoides Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 154 (type: *N. carolinensis* Blair; Kusaie).

Form slender, subcylindrical; head slightly concave between antennal insertions; inferior eye-lobe subtransverse; antenna slender, with scape slender, third segment longer than fourth, and fourth nearly twice as long as fifth; prothorax about as long as broad, briefly toothed at side; elytra parallel-sided, rounded apically; mesosternal intercoxal process nearly twice as broad as prosternal process; hind femur fairly slender.

This genus is endemic to the Carolines. Of those previously recorded, only the type species is being retained in the genus. The other two species included by Blair are being made the types of a new subgenus (*Sciadella: Acanthosciades*) and new genus (*Paremeopedus*), respectively. *Nonymoides swezeyi* Gressitt becomes a synonym of *Sciadella meridionalis* (Ohbayashi). *N. botelensis* Gressitt (1951, Longicornia **2**: 531; Botel-Tobago I., near Taiwan) should be called *Sciadella (s. str.) botelensis* Gressitt, new combination.

Key to Micronesian Species of Nonymoides

1. Head punctured; inferior eye-lobe barely deeper than gena; pronotum with about 24 punctures in an approximate row along median line; dorsum with pale pubescence, denser at side of pronotum, bordered internally with a brown stripe, and with brown spots on elytra; Kusaie............................**carolinensis**

   Head lacking distinct punctures; inferior eye-lobe twice as deep as gena; pronotum with about 16 punctures along median line; dorsum subglabrous, with a small spot of pale pubescence behind middle of each elytron........**subglabrus**

100. Nonymoides carolinensis Blair (fig. 32, *a*).

Nonymoides carolinensis Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6) : 154, fig. 12 (Kusaie; type in Bishop Mus.).

Male: Reddish brown, varying to pitchy or testaceous, with thin buff pubescence: head reddish, pubescence denser above; antenna reddish, with sparse pale hairs and longer oblique dark hairs beneath; prothorax reddish with tawny-buff pubescence, denser on side of disc; elytra reddish with tawny-buff pubescence on dorsal surface finely spotted with brown; ventral surfaces pitchy, changing to testaceous at apex and borders of abdomen, moderately clothed with tawny buff.

Head barely narrower than prothorax, not very closely punctured; vertex slightly concave; inferior eye-lobe barely deeper than gena below it. *Antenna* slightly longer than body, slender; scape subcylindrical, two-thirds as long as third segment; third slightly longer than fourth, twice as long as fifth. *Prothorax* as long as broad, feebly widened in middle, briefly toothed behind middle. *Elytra* parallel-sided, rounded apically; each with about five close, irregular rows of punctures on inner third and about eight more widely spaced and more regular rows on remainder. *Ventral surfaces* somewhat deeply punctured on side of thorax and first two abdominal segments. Length 5-6 mm., breadth 1.5-1.7 mm.

Female: Antenna barely longer than body. Length 5.5-6.2 mm., breadth 1.6-2 mm.

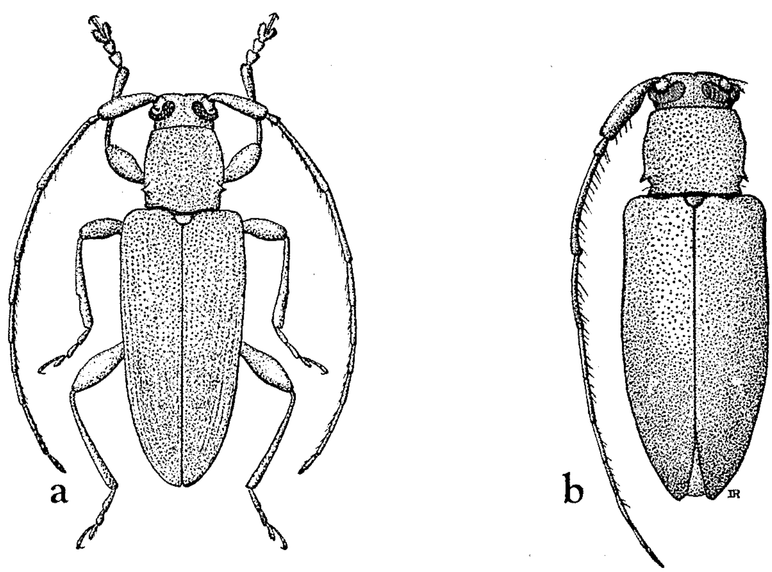


FIGURE 32.—a, *Nonymoides carolinensis;* b, *N. subglabrus.*

DISTRIBUTION: Eastern Caroline Is. (Kusaie); 53 specimens.

KUSAIE: Lelo (Lele) I., Dec. 1937, Esaki; Mt. Tafeayat, 150-400 m., Mt. Matante (Buache), 400-600 m., Aug. 1946, Townes; Mutunlik, Jan. 1953, Clarke, Gressitt; Mt. Fuinkol, Jan., Tafeayat River, Feb., Mt. Matante, Feb., Lele I. and Malem River, Mar. 1953, Clarke.

HOST: Possibly *Hibiscus*.

101. Nonymoides subglabrus Gressitt, n. sp. (fig. 32, *b*).

Male: Largely reddish; dorsal pubescence very thin, more distinct at sides of prothorax and elytra, with a very small pale pubescent spot behind middle of each elytron; antenna and legs reddish ochraceous, with apices of antennal segments pitchy.

Head smooth, micropunctulate; frons wider than deep; vertex concave, grooved medially; inferior eye-lobe as wide as deep, nearly twice as deep as gena below it. *Antenna* slightly longer than body, slender; scape slender, three-fourths as long as third segment; third one-third longer than fourth, more than twice as long as fifth. *Prothorax* nearly as long as broad, slightly broadened at middle of side, with a short tooth at side half way between middle and base; disc finely and closely punctured, slightly uneven. *Elytra* subparallel in basal three-fifths, narrowed posteriorly; each with close irregular rows on inner third and regular rows on remainder. *Ventral surfaces* closely punctured at side, to base of fourth abdominal segment. *Hind femur* subpedunculate-clavate. Length 5.7 mm., breadth 1.8 mm.

Paratypes: Length 4-6 mm., breadth 1.1-2 mm.

Female: Antenna slightly longer than body. Length 4.4 mm., breadth 1.4 mm.

Holotype, male (US 62694), summit Mt. Kupuriso, 600 m., Ponape, Mar. 10, 1948, H. S. Dybas; allotype, female (BISHOP 2395), Mt. Nahnalaud, 300 m., Mar. 17, 1948, Dybas; two paratypes, males (CM, BISHOP), Nanipil, Feb. 27, 1948, Dybas and southeast of Nanpohnmal, at 70 m., near Mt. Temwetemwensekir, Jan. 11, 1953, Gressitt.

DISTRIBUTION: Eastern Caroline Is. (Ponape).

This species differs from *N. carolinensis* in being a little less elongate and less parallel-sided, in having the head without distinct punctures, the antenna with segments darkened distally, the pronotum with about 16 instead of about 24 punctures in a rough row along median line, and the dorsum more glabrous and without a stripe at each side of pronotum.

Genus **Paremeopedus** Gressitt, new genus

Small; body broadened behind middle. Head narrower than apex of prothorax, nearly level between antennal insertions; inferior eye-lobe deeper than wide, deeper than gena below it. Antenna slender, slightly longer than body; scape slender, shorter than third segment; third and fourth segments subequal, each nearly twice as long as fifth. Prothorax subtransverse, slightly swollen near middle of each side. Elytra broadest behind middle, subregularly punctured, but more densely and irregularly so near suture. Prosternal and mesosternal intercoxal process moderately broad. Femora stout.

Type: *Nonymoides minimus* Blair.

Range: Caroline and Marshall Islands and Wake Atoll.

This genus differs from *Nonymoides* Blair in having the prothorax distinctly broader than long and slightly swollen instead of toothed at side and the elytra shorter and less parallel-sided. It differs from *Sciadella* Aurivillius in having the body shorter, the prothorax non-tuberculate, and the elytra more convex and less carinate laterally. It differs from *Emeopedus* Pascoe in having the elytra much shorter, the prothorax stouter, and the fourth antennal segment nearly twice as long as the fifth.

Key to Micronesian Species of Paremeopedus

1. Humeri distinctly broader than prothorax; elytra not much broader behind middle than basally 2
   Humeri barely broader than prothorax; elytra much broader behind middle than basally, with some pale areas; dorsum subevenly clothed with grayish-white pubescence; Wake .... **wakensis**
2. Irregularly punctured area on inner portion of elytron with about five irregular rows of punctures at middle; prothorax rounded-obtuse at side .... **minimus**
   Irregularly punctured area on inner portion of elytron with about three irregular rows of punctures at middle; prothorax obtuse at side; Kusaie.... **tiliacei**

102. Paremeopedus minimus (Blair), n. comb. (fig. 33, *a*).

Nonymoides minimus Blair, 1940, B. P. Bishop Mus., Occ. Papers **16** (6): 156 (Truk; type in Bishop Mus.).

Male: Reddish brown to pitchy, in part clothed with tawny, buff, or grayish pubescence: head pitchy reddish, moderately clothed with tawny buff; antenna reddish ochraceous, with some thin pale pubescence and suberect hairs and oblique brown bristles beneath; prothorax pitchy brown, clothed with tawny-buff pubescence, which is denser at side and base of disc; elytra reddish brown, variously marked with tawny to buff or gray pubescence, often arranged in interrupted stripes on outer two-thirds of each, and with a dark postmedian band; ventral surfaces and legs dark brown, thinly clothed with pale pubescence, denser on preapical portions of femora.

Head deeply and somewhat finely punctured, nearly horizontal between antennal insertions; inferior eye-lobe deeper than wide, subtriangular, nearly twice as deep as gena below it. *Antenna* barely longer than body, slender; scape three-fourths as long as third segment; third a little longer than fourth and twice as long as fifth. *Prothorax* four-fifths as long as broad, gradually and slightly broadened from apex to behind middle, narrowed basally; disc densely and deeply punctured. *Elytra* broadened to just behind middle, rounded apically; each densely punctured on sutural third and with 10 rows of deep close punctures at middle in outer two-thirds. *Ventral surfaces* punctured, heavily so on metasternum. Length 2-3.2 mm., breadth 1-1.3 mm.

Female: Antenna nearly as long as body. Length 2.4-3.8 mm., breadth 1.1-1.4 mm.

DISTRIBUTION: Eastern Caroline Is. and Marshall Is.; 108 specimens.

CAROLINE ATOLLS. Ngaiangl: Ngariungs I., Dec. 1952, Gressitt. Nama I.: Oct. 1952, Beardsley. Pingelap: Pingelap I., Jan. 1953, Gressitt.

TRUK. Ton (Tol): Mt. Unibot, 25-400 m., Dec. 1952, Gressitt; Sabote-Epin, Pata, Apr. 1940, Yasumatsu and Yoshimura. Fefan: Mt. Iron, 180 m., on *Glochidion,* Jan. 1953, Gressitt. Wena (Moen): 60-175 m., June-July, 1946, Townes. Tonoas (Dublon): Type locality, one, Oct. 1952, Beardsley.

PONAPE. Colonia-Nampir [Nanipil], Jan. 1938, Colonia-Paliker, July 1939, T. Esaki; Hydroelectric Plant [Nanipil], Aug. 1946, Townes; Metalanim [Madolenihm], Aug. 1946, Oakley; Agric. Exper. Sta., Mt. Beirut [Pairot], Tolenot [Dolen Net] Pk., Tolotom, Peipalap Pk., Napali I., June-Sept. 1950, Adams (sea level to 700 m.); Pairot, Temwetemwensekir, Kupuriso, Nanipil, and other localities, Feb.-Mar. 1948, Dybas; Nanpohnmal,

Temwetemwensekir, Pehlang, Jan. 1953, Gressitt; Nanpohnmal, Jan. 1953, Clarke.

MARSHALL IS. ARNO: Ine I., on *Messerschmidia,* June 1950, Usinger.

HOSTS: *Glochidion puberulum, Messerschmidia argentea.*

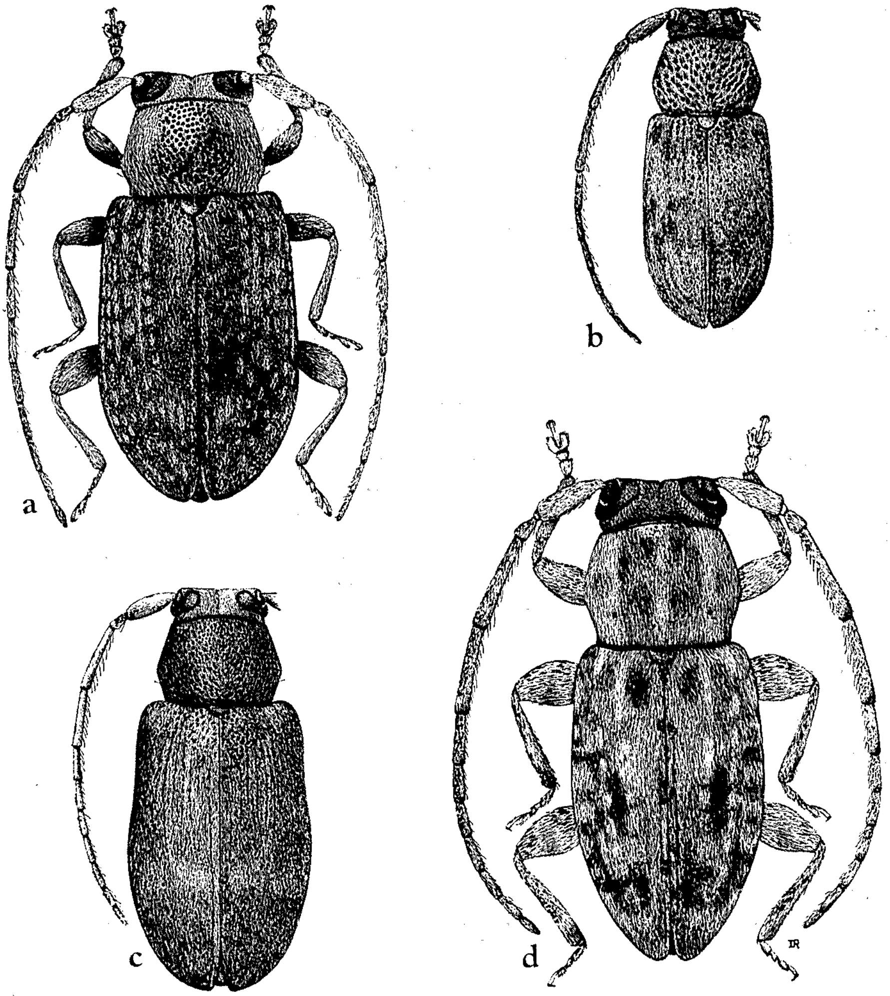


FIGURE 33.—**a**, *Paremeopedus minimus;* **b**, *P. tiliacei;* **c**, *P. wakensis;* **d**, *Boninella degenerata.*

103. **Paremeopedus tiliacei** Gressitt, n. sp. (fig. 33, *b*).

Male: Reddish brown to pitchy, irregularly clothed with tawny-buff or brown pubescence: head reddish with tawny pubescence, denser above; antenna pale reddish brown with sparse pale pubescence and oblique darker hairs beneath; prothorax reddish brown,

pitchy across middle, with incomplete tawny pubescence, the punctures giving a spotted appearance; elytra dark reddish brown, incompletely clothed with tawny-buff pubescence, forming, roughly a subbasal, a median, and a preapical band of brown, each interrupted with a few small pale spots, and the pale areas interrupted by punctures and some brown spots; ventral surfaces reddish with thin pale pubescence.

Head narrower than prothorax, deeply punctured; frons broader than deep; vertex horizontal between antennal insertions; inferior eye-lobe rounded-triangular, slightly deeper than gena below it. *Antenna* one-fourth longer than body, slender; scape cylindrical, very slightly thickened in middle, two-thirds as long as third segment; third slightly longer than fourth, fully twice as long as fifth. *Prothorax* three-fourths as long as broad, evenly convex at side; disc closely and deeply punctured. *Elytra* subparallel in basal two-thirds, conjointly rounded apically; each with close large punctures in four or five subregular rows on inner third and similar punctures in nine more widely spaced regular rows at middle in outer two-thirds. *Ventral surfaces* deeply punctured on thorax, finely on abdomen. *Femora* strongly swollen; tarsi small. Length 2.1 mm., breadth 1 mm.

Female: Antenna barely longer than body. Length 3.3 mm., breadth 1.4 mm.

Paratypes: Length 2.2-3.3 mm., breadth 1-1.2 mm.

Holotype, male (US 62695), "Hill 541," 165 m., south side Lelu [Lele] Harbor, Mar. 23, 1953, J. F. G. Clarke; allotype, female (US), same data; 26 paratypes (CAS, BM, KU, AMNH): several paratopotypes, and Lelu (Lele) I., "Hill 1010" (south of Mt. Matante), 300 m., Apr. 13, Tafunsak, 1 m., Mar. 10, and Malem River, Apr. 27, 1953, Clarke.

DISTRIBUTION: Eastern Caroline Is. (Kusaie).

HOST: *Hibiscus tiliaceus.*

This species differs from *P. minimus* in having the prothorax more flat and more convex at side and widest in the middle, the elytra more nearly parallel-sided, and the frons more deeply punctured above.

104. **Paremeopedus wakensis** Gressitt, n. sp. (fig. 33, *c*).

Female: Reddish brown, in part paler; largely clothed with thin whitish pubescence: head reddish, sparsely clothed with whitish; antenna testaceous beyond scape, thinly clothed with pale pubescence and with a single row of oblique hairs on underside; prothorax reddish brown, moderately clothed with buffy-white pubescence, which is slightly denser on side of disc; elytra reddish brown with pale spots by suture at end of basal quarter and across disc at beginning of apical third, moderately clothed with whitish pubescence which is denser in places; ventral surfaces reddish with buffy-white pubescence; femora brown; tibiae and tarsi testaceous.

Head finely punctured, horizontal between antennal insertions; inferior eye-lobe deeper than wide, slightly deeper than gena below it. *Antenna* slightly shorter than body, slender; scape subcylindrical, slightly thicker in middle, three-fifths as long as third segment; third somewhat longer than fourth; fourth twice as long as fifth. *Prothorax* a little more than one-fourth again as broad as long, slightly expanded behind middle of side; disc fairly even, densely and subfinely punctured. *Elytra* three times as long as prothorax, broadest just behind middle, slightly broader at humeri than prothorax; each densely punctured in about six irregular rows on inner third and subregularly punctured in about 10 rows on outer two-thirds. *Hind wing* reduced, shorter than elytron. *Femora* moderately stout; tarsi small. Length 2.8 mm., breadth 1.2 mm.

Paratype: Prothorax slightly broader; dorsal pubescence denser, with a postmedian pale band on elytra bordered with brown. Length 3 mm., breadth 1.25 mm.

Holotype, female (BISHOP 2396), Peale Islet, Wake Atoll, on *Sida*, July 31, 1923, E. H. Bryan, Jr.; paratopotype, female, same data.

DISTRIBUTION: Wake Atoll.

HOST: *Sida* sp.

This species differs from *P. minimus* in being narrower, with the prothorax more cylindrical, the elytra narrower basally and more widened behind middle, and more finely punctured and more evenly pubescent.

Genus **Boninella** Gressitt, new genus

Body constricted in middle; hind wing vestigial; head narrower than prothorax, inferior eye-lobe small, subtransverse; antenna longer than body, not very slender; scape shorter than third or fourth segments, longer than fifth; prothorax hexagonal, obtuse at side, unspined; elytra widest at middle, narrowed to humeri, narrowly rounded apically; prosternal intercoxal process broad, more than one-half as wide as acetabulum; mesosternal process as broad as acetabulum, slightly broader than long; femora stout.

Type: *Boninella degenerata,* new species.

Range: Bonin Islands

This genus differs from *Sciadella* in having the prothorax non-tuberculate, obtuse at the side and as broad at the base as at apex, and in having the elytra more convex at the middle than near the base and attenuated posteriorly. It differs from *Paremeopedus* in having the elytra less evenly convex and more narrowed basally and apically. It differs from both of these genera in having the prothorax relatively longer, the antenna stouter, and so forth.

105. Boninella degenerata Gressitt, n. sp. (fig. 33, *d*).

Male: Pale brown, in part testaceous or dark brown, partly clothed with pale pubescence: head dark reddish brown with moderately buff pubescence; antenna dull testaceous, darker at apices of segments, with moderately buff pubescence and a very short, fairly close fringe of oblique pale hairs beneath, and scattered shorter suberect hairs; prothorax brown, paler at base, with a median stripe and broader lateral discal stripe of buff; elytra pale brown with irregular marks, mostly narrow and subtransverse, of dark brown, moderately clothed with buff on pale areas, partly in broken longitudinal stripes; ventral surfaces ochraceous, slightly duller at side, with moderate pale pubescence; legs testaceous; femora with a dark ring on swollen portion of each; tibiae dark distally.

Head barely as broad as apex of prothorax, finely and subclosely punctured; frons nearly twice as broad as deep, vertex very shallowly concave; inferior eye-lobe oblique, broader than deep, barely deeper than gena below it. *Antenna* barely longer than body; scape cylindrical in distal half, two-thirds as long as third segment; third barely longer than fourth; fifth just over one-half as long as fourth. *Prothorax* five-sixths as long as broad, rounded-obtuse at side, similarly narrowed apically and basally, untoothed; disc very finely and closely punctured, about 27 punctures along median line. *Elytra* widest just before middle, narrowed to humeri, which are barely broader than prothorax, attenuated posteriorly, narrowly rounded apically; each with about 16 rows of punctures at middle, but the inner and outer rows confused. *Hind wing* two-thirds as long as elytron. *Ventral surfaces* distinctly punctured almost throughout. *Femora* strongly swollen; hind tarsus three-fifths as long as tibia. Length 3.5 mm., breadth 1.35 mm.

Female: Elytra with postmedian dark-brown spots forming an incomplete band; antenna not quite as long as body. Length 3.6 mm., breadth 1.45 mm.

Holotype, male (US 2396), Chichi Jima, Bonin Is., July 10, 1951, R. M. Bohart; allotype, female (US), same data. Thirteen paratypes (US, BISHOP, BM, CAS, KU): Eight, same data as for type, Bohart; Omura, Chichi Jima, June 30 to July 7, 1936, H. Ikeda; Omura, July 10, 1949, A. R. Mead.

DISTRIBUTION: Bonin Is.

This species differs from *Paremeopedus minimus* in having the antenna shorter and stouter, the prothorax longer and less rounded at the side, and the elytra less convex, more narrowed basally and apically, and with more rows of punctures, and so forth.